

CANCELLED



CITY AND ROYAL BURGH OF EDINBURGH  
PUBLIC HEALTH DEPARTMENT

ANNUAL REPORT  
ON THE  
HEALTH OF THE CITY  
DURING  
1942

BY THE  
MEDICAL OFFICER OF HEALTH



*With*

*Dr. W. G. Clark's*

*Compliments.*



PUBLIC HEALTH DEPARTMENT,  
JOHNSTON TERRACE,  
EDINBURGH, August 1943.

To  
*The Department of Health for Scotland and  
The Right Honourable the Lord Provost,  
Magistrates and Council of the City of Edinburgh.*

MY LORD PROVOST, LADIES AND GENTLEMEN,

I have the honour to submit the Annual Report of the Public Health Department of the City of Edinburgh for the year 1942.

**1. Fourth Year of War.**—The Report is the fourth issued under war conditions, and there is ample evidence in it to show that, despite the strain and turmoil of the times, the health of the community remained at a satisfactory level, and that in some respects the record of 1942 was better than that of any of the preceding wartime years. There were, for example, more births and fewer deaths than in any year since 1938. The infant mortality rate was the lowest ever recorded in the City and, apart from a spurt in mild cases of scarlet fever during the autumn and a brief but memorable battle with smallpox in November and December, no prolonged outbreak of infectious diseases or other illness affected the capacity of the citizens to pull their full weight in the war.

It is true that a further increase in the incidence of venereal disease caused anxiety here as in other parts of the country. On the other hand, the vigorous measures taken to hold tuberculosis in check showed signs of proving successful. No evidence was forthcoming to suggest that the rationing of food had had any adverse effect on nutrition. Indeed, the reports from medical officers working among pre-school children as well as from those engaged in the school medical service are unanimous in declaring that the standard of nutrition among the young was never higher than during the past year. There were, of course, adults who could not suppress a verbal grumble even if they did not complain officially, but those who are able to make comparisons agree that food supplies in the present war are better organised than was the case in 1914-18 and that the main problems are connected with delivery rather than with quantity, quality or variety.

**2. Outbreak of Smallpox.**—An outbreak of smallpox towards the end of the year—not altogether unexpected in view of the occurrence of cases in Glasgow and Fife—occasioned a good deal of perturbation while it lasted, and was quite the most startling event of the public health year. There had been no smallpox in Edinburgh for twenty-two years, and no large-scale outbreak for thirty-eight years. Accordingly, the possibility of a dread disease gaining a hold in the City during the course of a war was, for the present generation, a novel but alarming prospect. Fortunately all classes of the community co-operated loyally in accepting vaccination and in observing other precautionary measures, and the spread of the disease was checked and the outbreak limited to a period of slightly over two months.

Some aspects of the event are reviewed on another page, but it may be recorded here that the outstanding memories of a notable occasion were the commonsense attitude of the public and the valiant manner in which the personnel of the first-aid posts rose to the occasion in vaccinating over two-thirds of the population in a comparatively short time. The experience seemed to suggest that, in a blitz, Edinburgh's first aid services would not have been found wanting.

The outbreak was also notable for the co-operation that was quickly set up among neighbouring local authorities. In tracking down disease, city and county boundaries had to be ignored, and the Edinburgh and district smallpox outbreak will be recalled as an interesting example of the success of a regionalised health service. The three Scottish outbreaks had a similarity in their extent. Glasgow had 36 cases and 8 deaths. Fife had 29 cases and 8 deaths, and the Edinburgh and district outbreak 36 cases and 8 deaths. In all three areas, large-scale vaccination schemes were carried through.

**3. Looking Ahead.**—At the beginning of 1942 the civil defence services had outlived their "teething" troubles and had become a well-trained and responsive organisation. Happily the casualty services, for which the Public Health Department is responsible, were only slightly troubled by enemy action, and administrative work was chiefly confined to refresher courses and to schemes for the release of personnel required in industry. This reduction in defence staffs emphasised the turn in the tide of war and quickened interest in local and national problems that will arise after the war.

Among local problems our Public Health Committee, in association with the Education Committee, took an important step by providing for a reorganised and extended School Medical Service, under which an increased number of medical officers, dentists, nurses and clerkesses will be employed as and when the personnel becomes available. For dealing with maladjusted children, a Child Guidance Scheme was authorised, with clinic premises staffed by a psychiatrist, a psychologist, a psychiatric social worker and a secretary-receptionist. This staff will begin duty very shortly.

In the wider field of public health, what was held to be a new charter for the nursing profession appeared in the form of a Report by the Scottish Nurses' Salaries Committee, better known as the Taylor Committee. The terms of this Report will be implemented in full by the Corporation. The improved salary scales, much overdue, were intended to attract more women to the nursing profession and so overcome the shortage that is hampering the work of hospitals, and particularly local authority hospitals, throughout the country.

Other aspects of hospital development were being studied by a Scottish Departmental Committee on Post-War Hospital Problems. This Committee seeks a co-ordinated plan for combining the hospital services at present provided by voluntary bodies, by local authorities and by the State itself. There is good material to work upon, but the difficulties are considerable, and will take time to resolve.



National Committees are also considering schemes for the recruitment and distribution of nurses ; for the designing, furnishing and distribution of houses ; for the provision of houses and other services in the coalfields ; for dentistry services in the whole population ; and for a comprehensive medical service. In addition, the terms of the Beveridge Report are being carefully studied in their relation to present and future health services. A Nurses' Bill for Scotland seeks to give a recognised status to the assistant nurse and to regulate agencies for the supply of nurses. Finally, a Scottish Council for Health Education has been formed to co-ordinate schemes of propaganda.

From this rapid review of 1942, it is apparent that hope is written large on the public health page, and that the end of the war will find health administrators ready with at least the basis of well considered plans for improving the health, environment, and social welfare of the community. The City's services as they exist at the moment are reviewed briefly in this Report, and a selection is given of the principal statistics for the year.

**4. Vital Statistics.**—The outstanding features of the vital statistics for 1942 were as follows :—The number of births (7,386) was 452 higher than the previous year and the highest since 1938 ; the deaths (6,152) were 393 fewer than those of the previous year, and 353 below the average for the three war years (1939-1941) ; the infant mortality rate (56 per 1,000 births) and the maternal mortality rate (2·4 deaths per 1,000 births) were the lowest ever recorded in the City.

The fall in the number of deaths was due in part to the prevalence of milder weather as compared with conditions in the years 1940 and 1941, when prolonged winter, with fog and frost, caused a high incidence of pneumonia and bronchitis among the very young and the very old. Under the more favourable conditions of 1942, deaths from respiratory diseases, including influenza, were 417 fewer than those occurring in 1940, a year which opened with weather of unusual severity. The progressive decrease in deaths from respiratory affections over the past three years—927, 758, 510—is noteworthy in view of the lack of ventilation that sometimes has to be borne to make the black-out effective.

**5. Maternity and Child Welfare.**—All the established agencies of the Maternity and Child Welfare Department were maintained at their normal standard during the year, and it was an encouragement to the workers in this field to find the infant mortality rate receding to a new record level at 56 per 1,000 births. When the Department was created in 1917 the infant mortality was 123. A further increase in ante-natal supervision was noted, there being 1,096 ante-natal clinics held and 7,103 new patients seen during the year as compared with 1,068 and 7,038 in 1941. The readiness of the expectant mother to seek medical advice and care at the ante-natal clinics is one of the most potent factors in safeguarding the health of the mother and child and it is a good thing for Edinburgh that, over the years, this habit of pre-natal consultation should have become so firmly established.

Two of the chief problems in child welfare were the heavy demand for hospital accommodation in maternity cases and the difficulty of finding guardians for children whose mothers were ill or in need of recuperation. With husbands in the Forces, mothers are showing an increasing preference for admission to maternity

hospitals, and there is a drift citywards from other districts which tends to embarrass those in control of maternity wards. Additional maternity beds are about to be provided at the Western General Hospital, and this will relieve the situation to some extent. Accommodation for infants whose mothers are temporarily unable to give them attention is being provided at two of the Corporation's Day Nurseries, and further facilities in this direction will be available when Victoria Park House is re-opened at Leith.

Arrangements for administering the new Domiciliary Maternity Service scheme are almost complete. It will be some time before the facilities become known to those who are intended to benefit, but missionary work by the health visitors will help to give the scheme a fair start.

**6. Wartime Nurseries.**—The provision of wartime nurseries for children under five years whose mothers are engaged in war work or who are relieving persons so engaged was actively pursued by the Joint Committee of the Education Committee and the Public Health Committee who act with powers delegated to them by the Town Council. After the first six nurseries had been opened in the spring of 1941, requests for accommodation were received from districts in almost every ward of the City, and the Committee did good work in endeavouring to keep pace with the demand. This entailed many searches for suitable premises, and the preparation of plans for alterations and adaptations.

Altogether 27 nurseries and nursery classes were opened or were in contemplation, with accommodation for 1,381 children. In four of the nurseries a 24-hours service is provided. The Department of Health for Scotland erected an excellent *ad hoc* building for the wartime nursery at Granton, and three more of a similar type-plan are to be provided at Pilton, Pilrig and Craigmillar on the understanding that they, like the one at Granton, will be available for transfer to the Corporation after the war. At all the nurseries the food for infants under one year and for the staff themselves is prepared on the premises; the food for the older children is supplied from the school cooking centres.

The medical officers from the Child Welfare Department who visit the wartime nurseries regularly have stated that, with fresh air and a nutritious diet, the improvement in the health of the children is immediate and striking. What impresses the occasional visitor is the happiness and good manners of the children and the patience of those who look after them.

**7. Voluntary Health Workers.**—As in former years, valuable assistance in child welfare was given by members of the Voluntary Health Workers' Association, a body which has been identified with this work since 1908. In the course of the year the Association transferred on loan to the Corporation ten of its toddlers' playgrounds so that they might be adapted as wartime nurseries. There remained 19 other nurseries with 440 on the roll which the Association continued to manage with great acceptance to the parents. Nearly all of the playgrounds have waiting lists. The children are inspected regularly by the medical staff of the Child Welfare Department, and a record of the health of each child is kept. "Very sturdy children are to be found in all the playgrounds" says the Annual Report. A work



party staffed by the Association has for many years given good service in making infant garments and this sphere of help has been developed by the formation of a special sewing committee for wartime nurseries and of a voluntary committee or visitor for each wartime nursery as it is formed. To all these women workers the City owes a debt of gratitude.

**8. School Children.**—One of the chief points made in the review of the School Medical Service is that the standard of cleanliness among school children showed a further improvement. In session 1939-40 the incidence of nits and vermin among those inspected was 18·7 per cent. A year later the incidence was 8·1 per cent., and in session 1941-42 it had decreased to 6·7 per cent. The continued prevalence of scabies kept many children from school, and the setting up of four additional treatment centres in premises occupied as first-aid posts did something to arrest the spread of the disease. An intensive campaign of inspection, treatment, and disinfection in one specially affected area produced beneficial results, and it is hoped to make similar experiments in other areas.

School meals increased from 1,614,174 in 1940-41 to 1,810,820 in 1941-42, and one-third pint bottles of milk, retailed at a half-penny, increased from 6,271,314 to 9,171,126. These figures showed the trend in favour of feeding in schools. The wisdom of providing these nourishing meals is no longer questioned, and the medical officers in the school service frankly declare that nutrition standards are higher than before the war.

**9. Infectious Diseases.**—Notifications of infectious disease in 1942 numbered 6,959 as compared with 6,260 in the preceding year. The increase was due principally to outbreaks of measles and scarlet fever, measles showing a high incidence in the spring and scarlet fever being specially prevalent in the autumn and early winter. It has to be borne in mind that measles notifications are confined to those coming under the category of "the first case under five years in a household." The total of 2,307 for the year is therefore only a proportion of the number of persons affected. There were ten deaths attributable to measles.

The scarlet fever returns showed rising figures in July and August and the heaviest months were October with 364 notifications, November with 332, and December with 287. The total for the year was 2,023 as compared with 1,070 in 1941. Deaths from scarlet fever numbered five, and this, as in the case of measles, represented a low case mortality.

A slight increase was noted in the prevalence of diphtheria, the 1942 figures being 480 notifications and 31 deaths as compared with 446 notifications and 28 deaths in 1941. The immunisation campaign of two years ago had an apparently stabilising effect on diphtheria returns, but the best results will be achieved only when a greater proportion of pre-school children receive the protection as a routine procedure.

Cerebro-spinal fever notifications fell to 84 as against 194 in the previous year and 326 in 1940. There were 14 deaths. This represented a case mortality of 16·6 per cent., a low figure reflecting the improved forms of treatment now available with the sulphonamide compounds.

**10. Tuberculosis.**—Warnings sounded two years ago as to a probable increase in the incidence of tuberculosis resulting from war conditions did not go unheeded. An ominous situation was not rendered any brighter by changes in the medical staffs due to the claims of the Forces, but ways and means were found of maintaining a bold front in the anti-tuberculosis campaign. Briefly, the attack was made in two directions—first, by providing more hospital beds so that active sources of infection could be isolated, and second, by systematic examination of those who had been exposed to infection, particularly children and adolescent contacts. The additional hospital beds were obtained at Bangour, where 20 pulmonary and 100 non-pulmonary cases from Edinburgh were accommodated. There are now 394 beds under the charge of the Tuberculosis Officer as compared with 297 before the war.

Statistics about tuberculosis in 1942 showed that Edinburgh's experience had been more favourable than that of some industrial areas. For a second year in succession there was a decrease in the number of deaths from pulmonary tuberculosis. In 1939 there had been 285 such deaths, and in 1940 a sharp increase to 308. Then followed a fall in 1941 to 301, and another in 1942 to 289. On the other hand—and this is a point to be stressed—the number of new cases of pulmonary tuberculosis increased from 479 in 1941 to 501 in 1942. This may reflect a more rigid diagnosis, but the fact remains that the total of new notifications is the highest since 1934. The Tuberculosis Officer draws attention to an increased incidence among males under 15 years and to an even sharper rise among males aged 15 to 30. This emphasises the need for close medical supervision of boys reaching the wage-earning stage.

The Government have shown their concern about the possibility of an increased prevalence of pulmonary tuberculosis by setting up a scheme which provides for mass radiography, more hospital beds, payment of allowances to those undergoing approved treatment, and the rehabilitation and employment of sufferers from tuberculosis. One of the mass radiography sets will be allocated to Edinburgh when they become available.

**11. Venereal Diseases.**—There is a natural alarm about the marked increase in venereal diseases, and the critical analysis of the 1942 experience in Edinburgh, as given by the Clinical Medical Officer in charge of the Venereal Diseases Scheme, will be studied with deep interest. It should be borne in mind that the figures he gives relate to a regional scheme covering not only the City of Edinburgh, but also the Lothians and south-eastern counties, and that the centres are available free of charge to any one, including Services personnel, who may apply for advice and treatment. For 1942 the number of new applicants was 4,784, an increase of 269 over the previous year. Of these new applicants, 2,881 were found to be infected as compared with 2,910 in 1941.

Probably the most striking increase is that concerning early syphilis, of which there were 628 cases as compared with 432 a year earlier. In 1938 the number of cases of early syphilis was 124, which means that the latest figures represent an increase of more than 500 per cent. over those prevailing before the war. The

medical staff have continued their investigations into new forms of treatment and have done much to ensure rapid recovery with the object of reducing loss of manpower in the services and in essential industry.

Despite these efforts, a situation has developed which calls for firmer action with sources of infection. The Government have given Medical Officers of Health certain powers under Defence Regulation 33B, but in practice these powers have been found to be inadequate, and Edinburgh Corporation, along with other local authorities in Scotland, are seeking legislation to make notification and treatment of venereal disease compulsory.

**12. Hospitals.**—In 1942 the seven hospitals administered by the Corporation had by far their busiest season of the war, the admissions of patients numbering 20,310 as compared with 13,710 during 1941. The increase was not due to enemy action or to any sudden emergency, but rather to the fact that, in the general hospitals, a larger number of wards were opened to the normal needs of the public and the Services instead of being kept standing empty against the possibility of casualties occurring in air raids. This policy had two advantages. It relieved tedium among staffs by giving them more interesting work, and it helped the war effort by cutting down waiting lists and restoring sick and injured men and women to industry and the Services.

The Western General Hospital, with its specialised treatment in medical, surgical, maternity and children's wards, had the largest influx of patients, the admissions being 5,271 as compared with 3,654 in the previous year. The admissions included 1,203 to the wards of the Paderewski Hospital. There were in addition very large out-patient attendances, both at the Western Hospital itself and at the Polish Unit, where a dental department proved extremely useful. The setting up of a Norwegian Unit and the introduction of A.T.S. personnel as patients caused a steep rise in the admissions to the Southern General Hospital. Gogarburn Hospital also welcomed an increased number of service patients, and in February 1943 the colony of mental defectives was increased by the return of 83 Edinburgh patients who had been accommodated at Larbert for about two years.

Bangour Hospital opened new departments for gynaecology and surgical tuberculosis, and expanded its provision for plastic surgery, the treatment of brain injuries, and of ear, nose and throat conditions. The hospital has first-class laboratory and radiological services, and adequate staffs for physiotherapy, occupational therapy, and recreational activities. The East Fortune Sanatorium Unit has a place at Bangour, and the number of tuberculosis patients has been substantially increased by transfers from Edinburgh, Glasgow, Lanarkshire and other areas with a pressing need for more hospital beds. Bangour was to have been a base hospital for war purposes, and its development has been rather different from what was visualised, but there is no doubt about its value in the war effort, and its association with the Supplementary Medical Service in providing hospital treatment for recommended patients in the south-eastern counties is an interesting experiment that may help to determine hospital policy after the war.

The City Hospital at Colinton Mains had a memorable year with the smallpox outbreak, an emergency which emphasised the excellent facilities of the hospital



and the reputation of the staff for taking everything in their stride. Apart from smallpox the hospital was kept busy with 4,824 admissions throughout the year. This number was 885 above the total for 1941, due chiefly to an increase in cases of scarlet fever.

**13. Diphtheria Immunisation.**—The intensive campaign of 1941 to immunise children against diphtheria was continued into the following year, but it was not to be expected that the same large numbers would accept the protection. In 1941, the number immunised was 52,386. For 1942, the number was 11,065. This included 4,211 children under 5 years of age, 6,850 between 5 and 15 years of age, and 4 over 15 years of age. The number of children of school age was satisfactory considering the large proportion who had already been immunised. In the lower age group the response was considerably lower than that required to produce immunity in the child population. The ideal would be to have every child in the City immunised before it reaches the age of one year, and a doctor and a health visitor on the Public Health Staff are devoting a large part of their time to the special duty of encouraging mothers to accept immunisation for their children in the first year.

**14. Health and Comfort in Shelters.**—In the absence of enemy air raids, shelters are apt to be forgotten by the man in the street. Nevertheless, the duty remains to the local authority of ensuring that adequate cover is maintained, and maintained in a condition that will not endanger the health of possible occupants. Towards that end a medical officer, a sanitary inspector and four women inspectors continued their supervision throughout the year. Their report showed that the City's shelters—there are 660 public shelters and 3,009 domestic shelters, chiefly in backgreens and areas—were kept in a healthy and comfortable condition, with the exception of 165, or roughly 5 per cent., where the floors were dirty. Flooding was found in 48, and dampness or condensation in 187, but these conditions varied with the weather. Further progress was made in providing stoves for drying and heating, and in installing electric light, water supply and sanitary conveniences. Of the domestic shelters 2,268 are now provided with bunks. The inspectors continue to stress the importance of keeping the shelters clean and in a fit state to meet an emergency, and they pay visits during night alerts to study any problems that may arise.

**Conclusion.**—I wish to record my gratitude to the members of the Public Health and other Committees for their interest and support, and to express thanks to the various heads of Departments, Hospitals and Institutions and to all the staffs for their loyal service throughout the year.

I have the honour to be,

My Lord Provost, Ladies and Gentlemen.

Your obedient servant,

WILLIAM GEORGE CLARK,  
K.H.P., M.B., Ch.B., D.P.H. (Camb.), F.R.C.P. (Edin.),  
*Medical Officer of Health.*

## SMALLPOX.

## EDINBURGH AND DISTRICT OUTBREAK, 1942.

An outbreak of smallpox in Edinburgh and district began on November 1 and continued till December 18, 1942. There were 36 cases and eight deaths.

No case of smallpox had occurred in Edinburgh since 1920, and it was 38 years since the last large-scale outbreak took place. The occurrence was consequently a new experience for a large section of the population. In view of wartime conditions and of the need to maintain every phase of the war effort, the outbreak created keen public interest and was marked by a large response to the offer of vaccination, the number vaccinated being 274,411, representing 64·3 per cent. of the population. In the 1920 outbreak the estimated number vaccinated was over 80,000.

## PREVIOUS OUTBREAKS IN EDINBURGH.

The City's experience of smallpox during the past fifty years is shown in the following table :—

Year.	Cases.	Deaths.	Year.	Cases.	Deaths.
1893 ...	51	1	1918 ...	—	—
1894 ...	537	56	1919 ...	—	—
1895 ...	109	16	1920 ...	9	—
1896 ...	—	—	1921 ...	—	—
1897 ...	—	—	1922 ...	—	—
1898 ...	7	—	1923 ...	—	—
1899 ...	—	—	1924 ...	—	—
1900 ...	5	—	1925 ...	—	—
1901 ...	6	1	1926 ...	—	—
1902 ...	7	—	1927 ...	—	—
1903 ...	5	1	1928 ...	—	—
1904 ...	168	15	1929 ...	—	—
1905 ...	2	—	1930 ...	—	—
1906 ...	—	—	1931 ...	—	—
1907 ...	—	—	1932 ...	—	—
1908 ...	20	—	1933 ...	—	—
1909 ...	2	—	1934 ...	—	—
1910 ...	—	—	1935 ...	—	—
1911 ...	—	—	1936 ...	—	—
1912 ...	—	—	1937 ...	—	—
1913 ...	—	—	1938 ...	—	—
1914 ...	—	—	1939 ...	—	—
1915 ...	—	—	1940 ...	—	—
1916 ...	—	—	1941 ...	—	—
1917 ...	—	—	1942 ...	36	8

## CASES IN GLASGOW AND FIFE.

The 1942 outbreak was not entirely unheralded. It was preceded by one in Glasgow during June and July and by another in Fife during September and October of the same year. Although there was no actual confirmation of the fact, all three outbreaks were considered to have emanated from one case—that of a

seaman who arrived at Glasgow on a ship from Bombay on May 29 and who may have been infected while ashore at Capetown. In the course of two months following the discovery of this patient, 36 cases and 8 deaths were reported in Glasgow. The succeeding outbreak in Fife gave rise to 29 cases and 8 deaths.

It was feared that Edinburgh's turn would come in July when large numbers of Glasgow holidaymakers were due to make their annual visit to Portobello and other parts of the City. Oddly enough, no case occurred in Edinburgh at that time, and the City was considered to have had a fortunate escape. Nevertheless a precautionary vaccination campaign was instituted prior to the holiday rush. On June 30 the Medical Officer of Health recommended that vaccination should be offered to the following classes of persons: the police, civil defence workers, public utility employees (gas, electricity, water, and transport), administrative staffs of local authorities, and hospital and institutional staffs.

#### PRELIMINARY VACCINATION CAMPAIGN.

The task of vaccinating those who responded was undertaken by the Public Health Department medical staff, and was begun on July 1. In hospitals the staffs were vaccinated by resident medical officers. No offer of vaccination was made to the general public, but there was a considerable demand for lymph by general practitioners to carry out vaccinations in their private practices. Many people also visited the Public Health Department at Johnston Terrace to be vaccinated.

The number vaccinated in all these groups was estimated at 20,000. A good response was made by the police and by civil defence workers in the casualty services. The response by wardens was poor on account of the intervention of the Trades Holidays and an apparent lack of effective communication. Preparation was made to vaccinate 8,000 wardens at nineteen first-aid posts, but the number actually done was 572.

In addition to this preliminary vaccination scheme, work was begun in preparing the smallpox isolation hospital at Colinton Mains for the reception of patients, and tentative approaches were made to Midlothian County Council for the use of Drumshoreland Hospital at Broxburn to provide additional accommodation if it should be required. Victoria Park House, about to be re-occupied as a Children's Home, was earmarked as a reception house for the medical supervision of contacts. It had been standing empty after three years' occupation as a depot for casualty services personnel.

#### THE FIRST PATIENTS.

The progress of the outbreaks in Glasgow and Fife had been noted with interest. Both were characterised by a succession of sporadic cases reported at intervals of a day or two for a period of about eight weeks, followed by a tapering off until the outbreak had subsided. Glasgow's visitation had almost come to an end before the first case was reported in Fife. Similarly, Fife's flare-up was dying out when the first spark of trouble appeared in Edinburgh.

This was on October 28. On that date, a man aged 46 in Ward 13 of the Royal Infirmary, and on November 1 a boy aged 13 from the same ward were



removed to the City Hospital with suspicious symptoms. The diagnosis of smallpox was confirmed a day or two later. The boy died on November 10. A smallpox rash was next found in three male medical students who had no connection with the two hospital patients, and in 16 patients of the Royal Infirmary and its Convalescent Home at Corstorphine. Many of these patients had been returned to their own homes before the outbreak became known. One such patient died at Tranent before hospitalisation could be arranged, and another died at Cambuslang.

#### SPREAD OF INFECTION.

The cases in the Convalescent Home were confined to one male ward in which about half of the patients developed smallpox. The only connections between the Royal Infirmary and the Convalescent Home were the laundry and the inter-hospital ambulance, but no trace of infection having been communicated through these channels could be established.

Cases next began to appear among the general population without any known contact with other sufferers being established. From November 12 to November 30 eight such patients were removed to hospital. They resided in widely separated districts and belonged to various walks of life. One group represented three generations—a woman, her son, and his infant daughter. Another patient took a peculiar method of summoning medical help. She threw out of her window a coin wrapped in a piece of paper on which was written a message asking the finder to ring up her doctor and get him to call. This proved a good “story” for the newspapers and served to stimulate interest in the vaccination campaign. The woman was removed to hospital, but the finder of the message could not be traced.

#### PUBLIC SERVICE VEHICLES.

One of the medical students included among the first group of persons to be infected belonged to Bo'ness. It was found that he travelled in a particular S.M.T. bus on a certain day, and persons who travelled on that bus were advised to report to the M.O.H. in their area. A young woman residing in Merchiston district who developed smallpox travelled in an L.M.S. suburban train between Merchiston and Princes Street on the day she sickened, and another young woman belonging to Longstone who also became a smallpox patient was known to travel to her employment and back in a Corporation bus. An appeal was made in the press to the fellow-passengers of these patients to report at the Public Health Department, and a considerable number did so and accepted the offer of vaccination. The probable buses involved were taken out of service until thorough disinfection had been completed.

#### GOOD RESPONSE BY “CONTACTS.”

One of the male patients had been on duty with his company of the Home Guard the day before he became ill. It was arranged that all his fellow Home Guardsmen should report at the Public Health Department to be vaccinated and to return for several nights in succession so that medical supervision could be maintained. These and other lines of approach were made to discover persons who had had contact with smallpox, and the general rule was that an offer of

vaccination was readily accepted. There was moreover a willingness to comply with precautions connected with the destruction or disinfection of infected articles. Indeed, the readiness of the public to co-operate in adopting all recommended precautions is one of the outstanding memories of the outbreak.

#### ROUTINE PRECAUTIONS.

The first two cases of smallpox were confirmed on Sunday, October 31. The precautions adopted against the spread of infection included the removal of the two male patients from the Royal Infirmary to the smallpox wards of the City Hospital, the vaccination of all known contacts in the Royal Infirmary, and the sending of notices to Medical Officers of Health in areas to which patients from the affected ward had been discharged during the preceding three weeks.

One of the first two patients was a boy who resided at Niddrie Mains housing scheme. This fact became generally known in the area, and free vaccination was offered to all persons residing there. A very large response was made and doctors and nurses worked long hours at Craigmillar First-Aid Post to overtake the rush. Some 8,000 people were vaccinated at this post between November 1 and 7.

#### GENERAL VACCINATION BEGINS.

Vaccination of the public in all districts of Edinburgh was not deemed advisable at the outset, but after four days three more cases were reported and by November 6 eight confirmed cases were in hospital. On the evening of November 6 it was decided to offer vaccination to the citizens at large and to use first-aid posts as vaccination centres. The staffs of twenty posts were notified of this intention, and on Saturday, November 7, preparation was made to provide the posts with lymph and the necessary dressings and medical appliances, and to appoint doctors to carry out the vaccinations, beginning with a session from 2 to 4 o'clock on the following day, a Sunday. An announcement to that effect was made in the evening newspapers and an advertisement inserted in the Sunday press.

#### STAFFING THE VACCINATION CENTRES.

A circular had been sent to about 250 private practitioners warning them of the outbreak and asking for their co-operation in reporting cases of chickenpox which might possibly be incipient cases of smallpox. The doctors were also asked if they were prepared to take duty at vaccination sessions in the first-aid posts, and if so, what hours would be most suitable. From the replies it was found possible to cover about one-half of the sessions, the arrangements for each week being made in advance by telephone. Several medical post captains, *e.g.*, those at Dr. Guthrie's School, Trinity Academy, Mill Lane, and Eastern General Hospital, undertook to organise medical teams and arrange the timetables for their own posts, and this relieved the central office staff of part of a burdensome duty.

#### SIXTY SESSIONS PER DAY.

There were sixty sessions each day, and as some doctors could only serve on certain days and at certain hours, blanks in the timetable were filled by volunteers,

of whom there was a very good supply. These included women doctors residing in the City who were not practising, medical men awaiting calls to the Services, and others. A group of five Canadian Army doctors served at M<sup>c</sup>Ewan Hall Post while the rush was at its height and enjoyed the experience both for what they learned and as a gesture of help to the Old Country in an emergency.

It was found that the specially busy posts required teams of two, three and four doctors at certain sessions, mostly in the evenings, and extra medical help was provided from a reserve list. The aid of medical students was permitted at a few posts, and later on received official recognition by the payment of a fee for each session. The doctors in the school medical service gave the scheme valuable help by taking two sessions each per day during the first week.

#### NUMBERS VACCINATED AT POSTS.

There was enough lymph in stock to provide supplies for the Sunday session, and these were made up and distributed on the Sunday forenoon by the supervisor of nursing personnel in the Casualty Services and the five male supervisors of the Casualty Services. All was in readiness for the two o'clock opening, and in fine weather there was a good response from the public. Several posts carried on beyond four o'clock in order to satisfy the people who had attended, and at Royston Mains centre an evening session was arranged at the special request of a large number of near-by residents. The attendances for the day totalled 7,584.

Next day, a Monday, three sessions were available at all the posts, and the attendances increased to 16,448. Tuesday's figure was 28,680 and the peak was reached on Wednesday with 29,874 attendances, after which the figures declined daily. The total number vaccinated at the posts between November 8 and December 24 was 166,335, of whom 64 per cent. returned a week later for assessment of the result.

#### EFFECT ON THE PUBLIC.

The general public proved sensitive about receiving information regarding the progress of the outbreak. They first learned of its existence through the newspapers and the gravity of the situation was brought home to them by the appearance in the tramcars and buses of posters bearing the words "Beware Smallpox" and advising vaccination as a safeguard.

Despite wartime restrictions on space, the newspapers published lengthy bulletins each day. It was found advisable to set up a routine practice of supplying uniform reports at fixed times each day to all the newspapers, taking care that the bulletin contained an item of human interest as well as the daily statistics and appeals for co-operation. Names of patients were not mentioned, though the sex and station in life were generally indicated.

The public appeared to appreciate the frankness of the statements provided, and this tended to foster the spirit of active co-operation besides giving the citizens the feeling that those directing the campaign were going about it in the right way.



### AVOIDING FEAR COMPLEX.

No attempt was made to create a fear complex. There had been reports that in Fife the dread of contracting smallpox had caused some pitworking "contacts" to be ostracised. Similar conduct on a small scale was noted among neighbours in a district in the Canongate, but generally the Edinburgh citizens were alert without being unduly alarmed, and they responded well to the advice and the requests addressed to them by the Medical Officer of Health.

Press publicity was helpful in two ways. It was a means of tracing contacts, and it was invaluable in persuading large numbers of people to accept vaccination. People who had travelled in buses or trains in which a person who subsequently developed smallpox had also been a passenger were advised through the newspapers to report at Johnston Terrace, or, in the case of persons in other districts, to the Medical Officer of Health in their area. These requests were also made in the Scottish news bulletins of the B.B.C., and the response was such that health authorities were able in many cases to reach possible contacts with a minimum of delay.

### THE WEATHER AN ALLY.

Private practitioners had long queues at their surgeries every day, but by far the largest numbers were attracted to the first-aid posts, where the staffs hailed the vaccination scheme as a chance to prove their worth and a welcome break in the monotony of their lives. The citizens on their part regarded a visit to a first-aid post as a novelty, and were agreeably surprised to find the posts so well equipped and the staffs so competent in the performance of their duties. The experience had a further advantage. It enabled the citizens to become familiar with the location of the first-aid posts and to make a mental note as to how they would find their way about in the event of Edinburgh being subjected to large-scale bombing.

Fine weather proved a useful ally in the vaccination campaign. For November the conditions were exceptionally favourable in encouraging people to venture out to the first-aid posts and be vaccinated. While the campaign was at its height clear moonlight helped the attendances at the evening sessions.

### PURCHASE AND DISTRIBUTION OF LYMPH.

Before a large-scale vaccination campaign could be started, an adequate supply of calf lymph had to be assured. This was obtained partly from commercial houses preparing vaccine lymph under Government inspection and partly from the Ministry of Health Lymph Establishment in London. The net doses obtained were as follows:—

	Doses.	Cost.
From Commercial Houses ...	344,803	£5,535
From Ministry of Health ...	123,661	—
	<u>468,464</u>	

The supply from the Ministry of Health, valued at £2,061, was obtained free of charge.

Two reliable assistants were in charge of the distribution of lymph and did excellent work, not only in keeping accurate records of the quantities received and issued and their batch numbers, but in watching for apparent excessive consumption and so giving effect to the Government injunction to avoid waste of a valuable material. It was a routine practice to place reserve supplies in the refrigerator of the Bacteriological Department of the University, where it was maintained at the required temperature of  $-10^{\circ}\text{C}$ . For immediate issue, smaller quantities were kept in an ice chest in the Veterinary Department at Johnston Terrace.

In the first few days of the campaign, evidence of apparent waste of lymph was noted at several posts whose return of vaccinations was less than the number of doses received. This meant that practitioners were not making the full number of vaccinations from tubes containing five, ten or twenty doses, or from ampoules containing 25, 50 or 100 doses. The technique of vaccination had been carefully set down in a circular, and it was found necessary to send two further admonitory circulars, reminding doctors of the need to conserve lymph. These reminders had good results. As they became familiar with the technique, the doctors were able to give effect to the request that every tube or ampoule should provide the specified number of doses. By careful administration, some doctors succeeded in getting seven or eight doses out of a five-dose tube, and correspondingly larger numbers from the ampoules. It seemed a fair assumption that at the posts at least, the medical men, supported by capable assistants with nursing experience, were "lymph conscious," and reduced waste to a minimum. Private practitioners on the other hand were confronted with the difficulty of sometimes being in possession of nothing but five-dose tubes when they had only one patient to vaccinate, and it is probable that some waste of lymph occurred under these and similar circumstances.

#### QUALITY OF LYMPH.

No well-founded complaints were received as to the quality of the lymph. The general impression was that its potency was high. One newspaper reporter mentioned that his paper had received criticisms to the effect that the lymph was too fresh, and in reply it was found necessary to insert press notices assuring the public that all the lymph used in the campaign was prepared under the strictest Government supervision. A lively correspondence for and against vaccination proceeded in the columns of one newspaper for about a week, which showed that the "anti" section of the population was voluble enough however small it might be numerically. Actually the correspondence did no harm. It was rather helpful because it kept the subject of vaccination prominently before the newspaper reader and reminded him of his duty to go to the nearest first-aid post.

As has been indicated, the peak demand for vaccination occurred in the middle of the first week of the intensive campaign, following which the daily requests for lymph tapered off rapidly. The twenty first-aid posts had three sessions daily from 10 to 12, from 2 to 4 and from 7 to 9 p.m. for two full weeks. For the third and fourth weeks the number of posts open for vaccination was reduced to ten, and the forenoon session wiped out in all cases except Queen Street and M'Ewan Hall posts.

At Queen Street the morning session was popular with office workers in the neighbourhood, and M'Ewan Hall required three sessions daily because all entrants to the Royal Infirmary were vaccinated there. After the posts had been closed for vaccination, Moray House post was re-opened for seven sessions from December 9 to December 12, and for a further seven sessions from December 21 to December 24, with the object of encouraging residents in the Canongate area to accept vaccination in view of the occurrence of two belated cases of smallpox in the district.

#### CO-OPERATION WITH OTHER LOCAL AUTHORITIES.

On the footing that disease knows no boundaries, it had been agreed beforehand that the closest co-operation in measures to suppress smallpox would be maintained with neighbouring local authorities. The wisdom of this policy became apparent when it was realised that the outbreak, having originated in a large general hospital like the Royal Infirmary, would almost certainly involve persons from areas out-with the boundary of Edinburgh. In actual fact, the 36 persons who were eventually diagnosed as suffering from smallpox were domiciled as follows :—

Edinburgh ...	...	...	...	21
Midlothian ...	...	...	...	3
West Lothian ...	...	...	...	6
East Lothian ...	...	...	...	1
Berwickshire ...	...	...	...	1
Fifeshire ...	...	...	...	2
Lanarkshire ...	...	...	...	2
				<hr/>
				36
				<hr/>

Close contact was maintained with the Medical Officers of Health for these areas, and particularly with Dr. John Riddell, the Medical Officer of Health for Midlothian, West Lothian and Peeblesshire. In view of the occurrence of cases in Midlothian and West Lothian, Dr. Riddell opened centres for free vaccination at Musselburgh, Dalkeith and the Calders and other districts of Midlothian, and in Bo'ness, Bathgate, Armadale, Linlithgow, Broxburn, South Queensferry and other centres in West Lothian. For this work he obtained 69,795 doses of lymph from the Edinburgh supply. Dr. A. D. Campbell, Medical Officer of Health for East Lothian, conducted vaccination centres in Tranent, Prestonpans and Haddington, and obtained his own supply of lymph except for 4,000 doses taken from Edinburgh in an emergency and replaced later. Both of these Medical Officers of Health consulted with the medical staff of Edinburgh Public Health Department when any suspected case of smallpox was discovered in their areas, and the patients were removed to Edinburgh City Hospital, except in one case at Tranent, where the patient was too ill to be removed and died at home.

Co-operation with Midlothian also included an arrangement whereby Drumshoreland Hospital, near Broxburn, one of the County Council's infectious diseases institutions, was fitted up to accommodate 50 to 60 smallpox patients in the event of the number of beds available at Colinton Mains Hospital proving insufficient. For this purpose the alterations were carried out by the Edinburgh City Architect's Department, and it was arranged to lend equipment in the form of bedding, hard-



ware, crockery, etc., from the Corporation's Central Stores at Craiglockhart. This reserve accommodation was not required, and the stores did not leave Edinburgh. The negotiations in connection with the provision of additional hospital beds at Drumshoreland were promptly and harmoniously carried through by the Town Clerk of Edinburgh and the County Clerk of Midlothian, with the cordial support of their respective Public Health Committees.

#### HOSPITAL TREATMENT.

What is known as the "smallpox hospital" at Colinton Mains is a corrugated iron structure formerly used as an infectious diseases hospital at Slateford by Midlothian County Council. It was transferred from Slateford to Colinton Mains when the City boundaries were extended to include the suburban district of Slateford in 1920, and was re-erected in an isolated position west of the main hospital. Some use of the building was made at the last outbreak of smallpox in 1920, but thereafter it remained empty and was somewhat neglected until 1939, when it was used as a store for large quantities of bedding, blankets, sheets, towels and other hospital requisites purchased at the outbreak of war.

The Glasgow outbreak in July was an obvious warning that preparations should be started in Edinburgh, and the Public Health Committee agreed then to an expenditure of £700 recommended by the City Architect to provide subsidiary buildings at the smallpox hospital for disinfection and for a mortuary, and to make certain minor alterations and additions. This work had not been completed by November, but the City Architect mobilised a team of inspectors and clerks of works from his own Department—all skilled tradesmen—who finished the job in a praiseworthy last-minute spurt. The final scrubbing-out was done by enthusiastic male workers seconded from the Casualty Services, who took a pride in doing the work quickly and thoroughly, and offered to go back for any similar task.

#### NURSES ISOLATED.

All the nursing staff in the hospital had volunteered to work in the smallpox wards, and it was left to the Matron to select thirteen nurses whose health, experience, and temperament made them best suited for what was likely to be a long and arduous period of isolation. In addition two women from the Casualty Services joined the party for the purpose of doing any duty that might be required of them. The staff also included one man, a former porter in the hospital who had retired, and who left a position in a neighbouring hospital to be the porter and handyman of the smallpox wards.

From the entry of the first patients in October these workers remained isolated from the outside world, and in addition to nursing the patients, they did their own cooking and washing. They received letters but were not allowed to send any. For recreation they could walk in the grounds within the quarantine area, and they knitted and mended and did much to maintain the spirits of their patients. At Christmas they made paper decorations and had a Christmas tree and a celebration of their own. A patient from Bo'ness wrote to the Matron after his discharge expressing his gratitude to the "wonderful nurses." Other patients commented

on the excellent food they had received, and said they had been so well treated that the ordeal of an attack of smallpox, bad as it was, had been much less trying than they would have expected it to be. There was not a single discordant note to mar the chorus of praise for the work of the doctors and nurses. The Medical Officer of Health himself stated that several of the more acutely ill patients would not have survived had it not been for the extraordinarily high standard of nursing. Valuable aid was given by an experienced doctor home on sick leave from the Indian Medical Service. He served in the smallpox wards throughout a period of two and a half months at a time when medical officers were exceedingly hard to find.

#### THE CITIZENS' INTEREST.

Citizens showed their interest in and sympathy with the smallpox patients and nurses by sending them delicacies to eat and books and magazines to read. The gardener at Polton Farm Colony sent beautiful chrysanthemums from his greenhouse. When the outbreak was nearing an end, a lady resident in the Borders wrote asking to be allowed to send a money gift to "the heroic nurses who had saved us from a smallpox epidemic in wartime." This gift, amounting to £13, was duly received and was followed by smaller amounts from other donors which brought the total up to £18, 10s. When their labours were over at the end of nearly three months, the nurses and other staff received a 50 per cent. addition to their salaries and were given a fortnight's holiday.

Six deaths from smallpox took place in the City Hospital, one occurred in Tranent, and one in Cambuslang. It is gratifying to record that, in each of the seven cases in this district, the relatives readily agreed to cremation of the remains.

#### RECEPTION HOUSE.

Medical supervision of contacts was maintained by admitting them to Victoria Park House, Newhaven Road, Leith, which was furnished and prepared at short notice. The normal function of the institution was that of a children's home, and certain of its usual furnishings were unsuitable for adult inmates. It was therefore necessary to borrow mattresses, pillows, blankets and sheets from hospitals or from the central store at Craiglockhart.

Miss Bain, who had been Matron of the Children's Home when it closed in 1939, was serving as a ward sister at Colinton Mains Hospital, and it was a convenient arrangement to transfer her and place her in charge of the Reception House when she knew the premises so intimately. For the first evening, two members of the Women's Voluntary Services helped with the cooking and with putting the rooms in order. Next day, a woman member of the Casualty Services was transferred from Eastern General Hospital first-aid post and proved an able supervisor of the domestic needs of Reception House inmates. The wireless was restored to working order, and toys, books and games were provided.

A plentiful supply of excellent food went far to keep the inmates happy and contented. The women folk gave assistance with domestic tasks, and there was a general readiness to accept vaccination and to submit to the temporary isolation in the interests of public health. There were 30 persons admitted to the Reception House between November 2 and February 3.

## CLOSING OF HOSPITALS TO VISITORS.

Immediately on the discovery of sufferers from smallpox in its wards, the Royal Infirmary was closed to visitors. The City Hospital was similarly restricted and an announcement was made in the press that the Medical Superintendent would communicate with the relatives of any patient whose condition made a visit from relatives necessary. Arrangements were made to receive parcels for City Hospital patients at the Public Health Department in Johnston Terrace and there was a vanload every day. Three days after the first cases occurred, the Medical Officer of Health announced in the press that all the Corporation hospitals were closed to visitors, and he recommended the governing bodies of voluntary hospitals to follow the same course. All of them did so. As the weeks passed there were a few complaints by writers of letters-to-the-editor about the ban on hospital visiting, and it had to be made plain in press notices that the risk of infection was present until sixteen days had elapsed after a case of smallpox. The ban was lifted on Monday, January 4, and advertisements and paragraphs to that effect appeared in that morning's newspapers. Letters lifting the ban were also at the same time in the hands of the superintendents of hospitals and of the secretaries of governing bodies. There was general relief at the removal of the restriction, which had lasted two months.

## DISINFECTIONS.

Thorough disinfection of the homes and of the personal belongings of patients was carried out as soon as possible after the removal to hospital. Dwellinghouses were subjected to spraying by a 40 per cent. solution of formaldehyde and personal clothing was removed to the Disinfecting Station for disinfection by steam. The Superintendent of the Royal Infirmary arranged a disinfection of all the wards of his institution, and collaborated with Dr. R. P. Jack of the Public Health Department in disinfecting the wards of the Convalescent Home at Corstorphine and the clothing of patients who had been resident there.

The disinfecting process was such that damage to clothing took place, chiefly in the form of shrinkage. Five claims for compensation were received and passed to the Town Clerk for settlement. Claims for loss of wages were disallowed.

It was deemed advisable to destroy ration books, clothing cards, national registration identity cards and other printed material which had been handled by patients and contacts. The ration books and identity cards were replaced by the Food Executive Officer and the National Registration Officer whose headquarters were in the same building, and the clothing cards were replaced on representations being made to the Assistance Board.

Paper money to the value of £35, 10s. in one pound notes and ten shilling notes was burned in the presence of the Medical Officer of Health, who signed certificates in return for which the Banks furnished new notes. One Bank sent their own representative to the Public Health Department to witness the burning of notes.

Expenditure in connection with the outbreak amounted to £11,763, 18s. 11d.



## SUMMARY OF STATISTICS.

	1938	1939	1940	1941	1942
No. of Marriages ... ..	4,512	5,498	5,909	4,882	4,887
" Births ... ..	7,549	7,300	6,930	6,934	7,386
" Deaths (all causes) ... ..	5,974	6,169	6,802	6,545	6,152
Infantile Mortality Rate (deaths under 1 year per 1000 live births) ... ..	61	59	68	66	56

## Principal Causes of Deaths.

	1938	1939	1940	1941	1942
Heart Disease ... ..	1,404	1,530	1,548	1,596	1,455
Other Diseases of Circulatory System ... ..	183	187	201	183	245
Malignant Disease ... ..	883	884	891	934	972
Diseases of the Nervous System ... ..	685	733	828	817	781
Pneumonia (all forms) ... ..	337	318	400	351	272
Bronchitis ... ..	256	245	412	280	279
Tuberculosis (Pulmonary) ... ..	285	285	308	301	289
" (Non-Pulmonary) ... ..	74	74	85	76	67
Diseases of Early Infancy and Malformations ... ..	250	238	225	218	209

## Principal Infectious Diseases.

	1938		1939		1940		1941		1942	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Scarlet Fever ... ..	1,430	5	734	1	652	1	1,070	3	2,023	5
Diphtheria ... ..	600	44	361	29	749	61	446	28	480	31
Typhoid Fever ... ..	35	1	25	2	32	2	68	4	14	2
Cerebro-spinal Fever ... ..	20	14	23	2	326	45	194	36	84	14
Measles ... ..	2,248	36	678	2	2,818	13	1,123	7	2,307	10
Whooping Cough ... ..	253	4	1,521	41	255	8	1,365	44	135	2

TABLE showing the numbers of Births and Deaths in each ward of the City during 1942.

No.	WARD.	Area in Acres.	BIRTHS.	INFANTILE MORTALITY.		DEATHS.		
				Deaths.	Rate per 1000 Births.	PULMONARY TUBERCULOSIS.	*EPIDEMIC DISEASES.	ALL CAUSES.
1	Calton	228	295	19	64	9	9	251
2	Canongate	965	260	11	42	10	2	262
3	Newington	891	242	6	25	9	3	279
4	Morningside	1,358	216	6	28	6	1	350
5	Merchiston	677	222	8	36	3	2	325
6	Gorgie	676	419	16	38	9	4	291
7	Haymarket...	959	195	7	36	8	1	237
8	St. Bernard's	1,250	335	26	78	13	3	267
9	Broughton	472	283	17	60	12	4	239
10	St. Stephen's	190	229	17	74	4	1	224
11	St. Andrew's	206	166	12	72	8	1	116
12	St. Giles	266	243	20	82	12	6	246
13	Dalry	187	310	16	52	13	...	232
14	George Square	248	251	21	84	19	1	288
15	St. Leonard's	104	280	23	82	14	6	213
16	Portobello	2,200	616	23	37	34	7	451
17	South Leith	819	379	27	71	15	9	337
18	North Leith	218	253	13	51	11	4	190
19	West Leith	462	269	13	48	14	4	230
20	Central Leith	142	183	14	76	6	2	163
21	Liberton	6,339	486	44	91	17	11	239
22	Colinton	5,602	265	14	53	13	4	166
23	Corstorphine and Cramond	8,067	816	31	38	21	5	391
	Institutions	...	173	11	...	9	3	165
	Totals	32,526	7,386	415	56	289	93	6,152

\* Includes Typhoid Fever, Measles, Scarlet Fever, Whooping Cough, Diphtheria, and Diarrhoea and Enteritis under 2 years.

TABLE showing the number of Deaths (arranged in age groups) during 1942 from all causes and from certain specified causes.

	All Ages	Under 1 Year	1 and under 5 Years	Total under 5 Years	5 and under 10 Years	10 and under 15 Years	15 and under 25 Years	25 and under 35 Years	35 and under 45 Years	45 and under 55 Years	55 and under 65 Years	65 and under 75 Years	75 Years and upwards	Total above 5 Years
*Deaths from all causes { Both Sexes Males Females	6,152 3,027 3,125	415 243 172	126 71 55	541 314 227	42 21 21	40 19 21	154 69 85	186 64 122	281 149 132	489 272 217	1,047 574 473	1,601 838 763	1,771 707 1,064	5,611 2,713 2,898
Typhoid Fever	2	...	...	...	...	...	...	1	...	1	...	...	...	2
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox	6	...	...	...	...	1	...	...	1	...	4	...	...	6
Measles	10	4	3	7	2	...	1	...	...	...	...	...	...	3
Scarlet Fever	5	1	1	2	1	...	...	...	1	...	...	1	...	3
Whooping Cough	2	1	1	2	...	...	...	...	...	...	...	...	...	...
Diphtheria	31	...	20	20	5	2	1	1	...	1	...	1	...	11
Influenza	41	4	2	6	...	1	...	2	3	7	7	6	9	35
Erysipelas	2	1	...	1	...	...	...	...	...	1	...	...	...	1
Encephalitis Lethargica	9	...	...	...	...	...	...	1	1	1	...	3	2	9
Cerebro-Spinal Meningitis	14	2	7	9	...	...	...	...	...	...	1	...	...	5
Tuberculosis of Respiratory System	289	2	3	5	1	4	75	61	45	32	39	22	5	284
Tuberculous Meningitis	24	2	7	9	7	4	3	1	...	...	...	...	...	15
Tuberculosis of Intestines and Peritoneum	11	1	2	3	...	1	1	...	1	...	1	2	1	8
Other Tuberculous Disease	32	3	6	9	1	2	2	4	2	2	4	6	2	23
Malignant Disease	972	...	3	3	1	2	4	17	46	116	272	317	194	969
Rheumatic Fever	8	...	...	...	...	3	2	...	...	1	1	1	...	8
Meningitis, Diseases of Spinal Cord	38	6	5	11	2	...	1	...	2	3	8	5	6	27
Cerebral Haemorrhage, etc.	689	3	2	5	...	...	1	2	9	40	115	237	280	684
Other Nervous Diseases	92	8	1	9	1	5	4	5	15	11	19	16	7	83
Heart Disease	1,455	...	...	...	...	1	8	18	41	90	239	459	598	1,455
Other Diseases of Circulatory System	245	...	1	1	...	...	1	1	1	14	39	80	108	244
Bronchitis	279	16	5	21	...	...	1	3	7	21	55	87	84	258
Pneumonia (all forms)	272	77	15	92	5	2	3	8	9	16	35	53	49	180
Other Diseases of Respiratory System	112	5	3	8	1	1	...	6	9	17	18	23	29	104
Diarrhoea and Enteritis	59	36	9	45	1	...	1	...	1	...	6	2	3	14
Appendicitis	16	...	...	...	1	1	2	...	1	1	4	2	4	16
Diseases of Liver and Gall Bladder	51	...	...	...	1	1	...	1	5	11	11	13	9	51
Other Diseases of Digestive System	120	5	1	6	...	...	4	3	8	17	30	31	21	114
Nephritis—Acute and Chronic	146	...	1	1	...	...	2	3	20	19	23	44	34	145
Other Genito-Urinary Diseases	113	1	1	2	...	...	2	3	2	6	19	31	48	111
Puerperal Sepsis	10	...	...	...	...	...	1	6	3	...	...	...	...	10
Other Diseases associated with Childbirth	8	...	...	...	...	...	1	5	2	...	...	...	...	8
Diseases of Early Infancy and Malformations	209	204	2	206	1	...	1	1	...	...	...	...	...	3
Violent Deaths	297	10	10	20	7	4	22	20	17	28	35	60	84	277
Old Age	137	...	...	...	...	...	...	...	...	...	...	...	...	137
All Other Causes	346	23	15	38	...	8	10	13	29	31	61	82	74	308

\* Deaths due to war operations are excluded.



# INFECTIOUS DISEASES.

The following Table shows the number of notifications for each month of the year 1942:—

Disease.	Jan.	Feb.	Mar.	April.	May.	June.	July.	August.	Sept.	October.	Nov.	Dec.	Total.
Smallpox ...	...	...	...	...	...	...	...	...	...	1	19	7	27
Diphtheria ...	30	42	47	30	36	23	21	27	47	69	38	70	480
Erysipelas ...	26	23	18	8	12	14	28	13	18	18	21	30	229
Scarlet Fever ...	114	75	104	63	85	63	108	150	278	364	332	287	2,023
Typhoid Fever ...	3	1	...	...	6	...	...	...	1	...	1	2	14
Puerperal Fever ...	11	8	...	12	5	6	...	...	14	14	8	9	116
Puerperal Pyrexia ...	...	11	8	9	8	11	2	7	10	5	2	6	79
Cerebro-spinal Fever ...	10	9	16	6	5	6	6	3	4	2	10	7	84
Infective Jaundice ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculosis, Pulmonary ...	31	40	41	47	37	51	46	34	46	42	48	38	501
Tuberculosis, other forms ...	9	17	12	17	16	18	22	15	16	11	19	11	183
Ophthalmia Neonatorum ...	4	4	6	9	9	6	3	4	1	6	13	3	68
Malaria ...	...	...	1	1	...	...	...	1	2	1	...	...	6
Dysentery... ..	14	12	17	12	25	17	31	41	34	33	9	7	252
Acute Influenzal Pneumonia ...	15	10	13	8	5	...	...	...	1	2	...	2	56
Acute Primary Pneumonia ...	50	59	47	53	59	13	...	11	14	18	15	24	383
Measles ...	304	455	577	514	230	81	61	20	18	10	13	24	2,307
Whooping Cough ...	16	12	8	9	15	10	9	13	11	4	10	18	125
Poliomyelitis ...	...	...	...	1	1	1	2	...	1	1	1	3	11
Polio-encephalitis ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica ...	...	...	...	...	...	...	...	1	1	...	...	2	5
Totals ...	637	778	928	799	554	320	367	348	517	602	559	550	6,959

## CITY OF EDINBURGH.

## DIPHTHERIA IMMUNISATION SINCE 1923.

Year.	Number Pro- tected.	Total Cases Notified.	Immunised Children Notified.	Fatal Cases Amongst the non-Immunised	Fatal Cases Amongst the Immunised.
1923 ... ..	157	770	...	69	...
1924 ... ..	3,329	720	28	73	...
1925 ... ..	256	870	16	82	...
1926 ... ..	1,969	552	18	43	...
1927 ... ..	1,603	599	27	44	...
1928 ... ..	743	629	11	30	...
1929 ... ..	1,194	1,171	66	53	2
1930 ... ..	1,175	1,102	24	71	...
1931 ... ..	560	901	20	28	...
1932 ... ..	776	662	3	27	...
1933 ... ..	1,940	606	12	21	...
1934 ... ..	3,362	546	13	26	1
1935 ... ..	3,856	308	2	16	...
1936 ... ..	2,717	374	6	26	...
1937 ... ..	3,440	622	11	43	...
1938 ... ..	4,038	600	31	43	1
1939 ... ..	2,075	361	23	29	...
1940 ... ..	1,429	749	6	61	...
1941 ... ..	52,386	446	29	28	...
1942 ... ..	11,065	480	74	29	2
	98,070	13,068	420	842	6

## TUBERCULOSIS DEPARTMENT.

### ANNUAL REPORT BY THE TUBERCULOSIS OFFICER.

The conditions existing in a country engaged in total war are peculiarly conducive to an increased prevalence of tuberculosis, especially in its pulmonary form. It is one of the diseases which has always flourished under the stress and strain of war, and the present world crisis has, for the time being, not only put an end to the progress which was being made so steadily in the pre-war years, but anti-tuberculosis work has sustained a definite set-back.

### PULMONARY TUBERCULOSIS.

**Notifications.**—In 1942 there were 501 cases of pulmonary tuberculosis notified to the Department. This represents an increase of 22 over the previous year—the average number for the previous five years was 473. A study of the table of notifications on page 26 shows that there has been an increase in the number of cases in the male age group under 15 years of age, indeed the 25 cases reported in 1942 is the highest for ten years. A more startling increase is recorded in the male group 15-20, in which the number of notifications has almost doubled since the onset of war, *i.e.*, 26 in 1938, and 51 in 1942. In the same age group, it is gratifying to report a very substantial decline in the number of female cases notified: there were 36 cases recorded in 1942 as compared with 53 in 1941. The following ages group (20-25), however, reveals the fact that the number of female cases notified has increased from 27 in 1941 to 51 in 1942, the average for the preceding five years being 38. A certain proportion of these cases in this female age group are women discharged from the services (A.T.S., W.A.A.F. and Land Army), and women munition workers. The continued physical or mental strain to which they may be submitted under service or industrial conditions results in a lowering of the bodily resistance to tuberculosis, and is a potent factor in causing the disease. Despite all the precautions which are exercised it sometimes happens that an unrecognised case of pulmonary tuberculosis is recruited into the services or industry, and thus constitutes a focus of infection, and consequently a danger to others by spreading the disease.

**Deaths.**—The number of deaths recorded in 1942 from pulmonary tuberculosis was 289, which represents a reduction of 12 on the preceding year, and 7 below the average for the preceding five years. It is especially interesting to note that in the past year more females than males died of the disease—149 of the former, and 140 of the latter. It is 21 years since a similar fact was recorded in Edinburgh. During the year 1921 there were 381 deaths, of which 187 were males and 194 females.

### NON-PULMONARY TUBERCULOSIS.

**Notifications.**—The notifications received totalled 183, which is 2 less than in 1941. There were 67 deaths during 1942. This is an encouraging reduction as compared with 1941, when 76 deaths were recorded; in 1940 the total was 85. Tuberculous meningitis accounted for 24 of the deaths, and represented approximately 36 per cent. of the total.

Repeated researches have shown, beyond any doubt, that a very considerable proportion of all cases of non-pulmonary tuberculosis is due to infection with the bovine type of tubercle bacillus contained in the milk derived from cows suffering from tuberculousis. As milk plays such a major part in the nutritional requirements of infants and children, not a few of the cases of tuberculousis of bones and joints, glands, etc., occurring in them are due to this cause, and much loss of life, invalidism, suffering and crippling deformity could be definitely avoided if infection with the bovine type of bacillus were eliminated.

There appears to be, in certain quarters, cogent arguments against the adoption of compulsory pasteurisation of our milk supply, but the value of this measure in the control and eradication of forms of tuberculosis of bovine origin leaves no possible room for doubt. It can, in fact, be definitely asserted that if all the milk intended for human consumption were submitted to efficient pasteurisation, under proper conditions, tuberculosis of bovine origin would cease to exist. Until such time the risk of conveying tuberculous infection can be avoided by boiling the milk. Any tubercle bacilli which it may contain are thereby killed and rendered harmless.

#### PULMONARY TUBERCULOSIS NOTIFICATIONS.

Year.	Under 15 years.		15-20 years.		20-25 years.		25-35 years.		35-45 years.		45-55 years.		55-65 years.		65+ years.		TOTALS.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Males.	Females.	TOTAL.
1932 ...	26	22	17	21	34	44	68	59	52	30	54	21	32	11	15	7	298	215	513
1933 ...	18	30	30	25	41	39	68	63	54	47	58	13	26	21	14	6	309	244	553
1934 ...	20	22	15	31	39	47	81	72	44	29	50	20	34	20	7	5	290	246	536
1935 ...	18	19	15	26	22	40	58	52	41	23	37	18	33	12	15	8	239	198	437
1936 ...	7	10	23	36	37	52	55	62	39	23	48	19	36	12	13	21	258	235	493
Average 1932-36	18	21	20	28	35	44	66	62	46	30	49	18	32	15	13	9	279	228	507
1937 ...	20	17	26	47	47	43	52	45	50	35	34	23	21	10	11	6	261	226	487
1938 ...	12	14	26	39	31	45	58	53	46	29	44	12	28	16	14	9	259	217	476
1939 ...	12	18	28	47	26	32	50	44	30	21	43	20	24	14	14	10	227	206	433
1940 ...	14	13	40	50	25	45	45	62	56	22	41	13	25	15	19	4	265	224	489
1941 ...	20	28	30	53	21	27	40	62	46	26	39	19	26	9	17	7	248	231	479
Average 1937-41	16	18	32	47	30	38	49	53	46	27	40	17	25	13	15	7	252	221	473
1942 ...	25	17	51	36	24	51	55	59	53	24	33	8	34	12	9	10	284	217	501



## PULMONARY TUBERCULOSIS DEATHS.

Year.	Under 15 years.		15-20 years.		20-25 years.		25-35 years.		35-45 years.		45-55 years.		55-65 years.		65 + years.		TOTALS.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Males.	Females.	TOTAL.
1932 ...	4	8	3	7	18	22	42	48	36	23	37	15	19	12	11	8	170	143	313
1933 ...	2	10	9	11	15	26	50	34	36	19	38	16	22	13	13	8	185	137	322
1934 ...	7	11	5	11	11	20	42	37	30	20	39	11	26	15	10	7	170	132	302
1935 ...	7	6	4	8	9	15	28	32	31	19	30	16	26	12	16	6	151	114	265
1936 ...	1	5	11	9	15	21	26	30	26	20	40	13	28	9	17	16	164	123	287
Average 1932-36	4	8	6	9	14	21	38	36	32	20	37	14	24	12	13	9	168	129	297
1937 ...	2	8	10	22	19	25	33	46	28	16	22	11	30	13	8	7	152	148	300
1938 ...	7	3	12	23	17	29	33	28	23	22	37	3	21	10	13	5	163	123	286
1939 ...	4	4	7	14	15	21	21	30	33	19	41	18	25	9	17	7	163	122	285
1940 ...	5	8	11	22	8	21	31	41	37	12	30	16	24	13	20	9	166	142	308
1941 ...	3	7	9	16	10	34	31	38	31	15	27	17	31	10	18	4	160	141	301
Average 1937-41	4	6	10	19	14	26	30	37	30	17	31	13	26	11	15	6	161	135	296
1942 ...	5	5	19	22	11	32	20	41	28	17	25	7	28	11	13	14	140	149	289

## INSTITUTIONAL TREATMENT.

**Royal Victoria Hospital.**—The following table shows the number of patients treated in the Royal Victoria Hospital in the course of the year.

	Remained at 1st January.	Admitted.	Discharged.	Died.	Remaining at 31st December.
Men ... ..	34	47	51	...	30
Women ... ..	34	48	52	1	29
Children ... ..	6	11	8	...	9
Totals ... ..	74	106	111	1	68

The encouraging results which for years have been obtained by the use of artificial pneumothorax have led to an ever-increasing number of cases in which this form of therapy is employed. During the past year recourse was had in several instances to phrenicectomies, thoracoplastics and other forms of surgical treatment in those patients in whom such measures were indicated. When major surgical procedures are under contemplation, appropriate action is undertaken only after consideration and discussion with my colleague, Mr Walter Mercer, F.R.C.S., Consulting Surgeon to the Tuberculosis Department.

**Colinton Mains Hospital.**—There were 349 cases of pulmonary tuberculosis admitted to the City Hospital during the year and these together with the 133 which remained at the end of 1941, made a total of 482 patients who received treatment. The table shows the number of patients dealt with :—

	Remained at 1st January.	Admitted.	Discharged.	Died.	Remaining at 31st December.
Men ... ..	84	192	117	59	100
Women ... ..	46	152	79	53	66
Children ... ..	3	5	6	1	1
Totals ... ..	133	349	202	113	167

In view of the constant heavy pressure on the bed accommodation and an increasing waiting list, an additional ward was made available for the reception of patients suffering from the disease in its advanced stages. This afforded forty-four extra beds (24 for females and 20 for males). Patients are now accordingly admitted more expeditiously and the danger resulting from repeated infection of the other members in the patient's home is thereby appreciably reduced. The segregation and isolation of the victims of advanced consumption are of fundamental importance in any successful attempt at tuberculosis control, and it is essential, if satisfactory results are to be obtained, that adequate hospital accommodation should always be readily available for patients of this type.

In addition, 51 surgical cases were treated, and the following table refers to them :—

	Remained at 1st January.	Admitted.	Discharged.	Died.	Remaining at 31st December.
Men ... ..	10	...	8	...	2
Women ... ..	15	...	14	1	...
Children ... ..	25	1	26	...	...
Totals ... ..	50	1	48	1	2

**Bangour Hospital.**—In view of the urgent need for additional accommodation for the reception of surgical tuberculosis patients, it was arranged that a further 50 beds be set aside at Bangour Emergency Hospital, making a total of 100 beds available for cases of this type. During the year 108 patients were admitted, and the following table shows the distribution of the cases :—

	Remained at 1st January.	Admitted.	Discharged.	Died.	Remaining at 31st December.
Men ... ..	15	28	18	1	24
Women ... ..	14	37	16	2	33
Children ... ..	22	43	19	3	43
Totals ... ..	51	108	53	6	100



## TUBERCULOSIS DISPENSARIES.

The following table shows the attendances of old and new cases at the Edinburgh and Leith dispensaries during the past five years :—

		Old Cases.		New Cases.	
		Edinburgh.	Leith.	Edinburgh.	Leith.
1938	...	14,282	2,331	2,546	418
1939	...	9,406	1,579	2,332	367
1940	...	8,252	1,540	2,516	443
1941	...	10,984	1,689	2,550	416
1942	...	11,874	1,936	2,901	314

**Artificial Sunlight Treatment.**—This form of therapy is used exclusively for the non-pulmonary forms of tuberculosis, most of which respond in a very gratifying manner. The total exposures made during the year was 7,777.

**Home Visitation.**—During the year 12,715 visits were made to patients' homes by the medical and nursing staffs. The following table shows the number of visits during the past five years :—

1938	...	...	...	12,977
1939	...	...	...	11,279
1940	...	...	...	11,357
1941	...	...	...	12,719
1942	...	...	...	12,715

## CHILD WELFARE DEPARTMENT.

Statistics for the Year 1942.

**Curative Clinics.**

No. of Clinics held	...	...	...	...	...	...	...	...	519
No. of New Cases seen	...	...	...	...	...	...	...	...	2,688
No. of revisits	...	...	...	...	...	...	...	...	11,098

**Preventive Clinics.**

No. of Clinics held	...	...	...	...	...	...	...	...	1,001
No. of New Cases seen (under 1 year)	...	...	...	...	...	...	...	2,995	
Do. (over 1 year)	...	...	...	...	...	...	...	605	
									3,600
No. of revisits (under 1 year)	...	...	...	...	...	...	...	18,576	
Do. (over 1 year)	...	...	...	...	...	...	...	6,771	
									25,347
Total No. of cases seen (under 1 year)	...	...	...	...	...	...	...	21,571	
Do. (over 1 year)	...	...	...	...	...	...	...	7,376	
									28,947

**Ante-natal Clinics.**

No. of Clinics held	...	...	...	...	...	...	...	...	1,096
No. of New Cases seen	...	...	...	...	...	...	...	...	7,103
No. of revisits	...	...	...	...	...	...	...	...	36,818

**Home Visits to Mothers and Children.**

				1st Visits.		Subsequent Visits.		Ante-natal.	
				—1 yr.	+ 1 yr.	—1 yr.	+ 1 yr.	1st.	Sub.
By Health Visitors	...	...		5,399	738	9,434	22,340	1,084	524
„ Students	...	...	...	367	416	1,052	4,979	92	57
„ Queen's Nurses	...	...		1	45	—	162	—	2
				5,767	1,199	10,486	27,481	1,176	583
				6,966		37,967		1,759	
				44,933					

**Edinburgh—INFANTILE MORTALITY (deaths under One Year per 1000 Births).**

Year.	Infantile Mortality.	Year.	Infantile Mortality.	Year.	Infantile Mortality.	Year.	Infantile Mortality.
1880	143	1896	122	1912	110	1928	75
1881	128	1897	164	1913	101	1929	80
1882	121	1898	*141	1914	110	1930	82
1883	128	1899	147	1915	132	1931	69
1884	135	1900	132	1916	100	1932	73
1885	120	1901	143	1917	†123	1933	66
1886	136	1902	119	1918	94	1934	62
1887	137	1903	117	1919	§117	1935	70
1888	128	1904	125	1920	89	1936	68
1889	133	1905	124	1921	96	1937	70
1890	144	1906	112	1922	91	1938	61
1891	138	1907	121	1923	82	1939	59
1892	135	1908	†114	1924	89	1940	68
1893	148	1909	113	1925	96	1941	66
1894	125	1910	103	1926	80	1942	56
1895	152	1911	115	1927	80		

\* Sanitary Dept. formed 1898. † Voluntary Visiting in homes. ‡ Child Welfare Dept. formed May, 1917.  
 § Reflection world influenza epidemic, 1918-1919. || City Boundaries extended.

## DEPARTMENT OF VENEREAL DISEASES.

## CLINICAL OFFICER'S REPORT FOR THE YEAR 1942.

The statistical returns for 1942 show an increase in the number of new patients, the 1942 total being 4,784 as against 4,515 in 1941, an increase of 269.

Of the new patients examined, the number found to be infected was 2,881, a slight decrease on the figure 2,910 recorded in 1941. The details of the 1942 infections are given in tabular form and for comparison are followed by the figures for 1941, the latter being in brackets :—

Syphilis	...	...	...	1,082	(912)	37·6 (31·3)	per cent.
Gonorrhœa	...	...	...	1,113	(1,187)	38·6 (40·8)	„
Chancroid	...	...	...	36	(53)	1·3 (1·9)	„
Non-specific venereal disease	...	...	...	650	(758)	22·5 (26·0)	„

In correspondence with the general increase in the number of new patients, in-patients have also increased from 1,300 in 1941 to 1,406 in 1942, and the out-patient attendances have risen from 72,483 in 1941 to 78,828 in 1942.

**Developments and Improvements.**—In the treatment of uro-genital infections during 1942, further new sulphonamide drugs were given clinical trials designed to ascertain their potency in combating gonorrhœal and other infections. As a result of these trials, which are being assessed, sulphadiazine emerged as a useful addition to the therapeutic armamentarium, and one, moreover, which might have some success in cases intolerant of or resistant to sulphapyridine and sulphathiazole.

In general, it may now be said that the oral exhibition of the sulpha-drugs has assumed the position of first-choice in the therapy of urinary infections, and the old technique of irrigation has been relegated to the place of an adjuvant, and not invariably necessary, procedure. Local application of sulphanilamide, sulphapyridine, and sulphathiazole, in powder or liquid form, has been tried and found helpful in certain conditions, but, for the most part, reliance is placed on the rapidity and virtual certainty of absorption from the gastro-intestinal tract after oral or rectal (suppository) application. Limited use has been made of intravenous or intramuscular injections of soluble or suspended sulphapyridine in cases where the most rapid action is desirable.

One of the most interesting and effective developments in technique has been the employment of a combination of fever therapy and chemotherapy in the treatment of resistant cases of gonorrhœa. This synergy of fever cabinet and sulpha-drug treatment was fully described in an article published in the *Edinburgh Medical Journal*, Vol. XIIX. p. 584, 1942, entitled “Combined Inductopyrexia and Chemotherapy in the Treatment of Resistant Gonorrhœa.” As a result of the striking success of this process, a continuous stream of resistant cases of gonorrhœa has flowed into the department from various Services V.D. departments and hospitals throughout the country, as far removed as Southampton and Northern Ireland. Recourse has been had also to this procedure in order to secure the most

rapid beneficial effect in such cases as gonococcal infection of the eye, where the threat to vision through ulceration of the cornea can now be averted with almost complete assurance. Good results continue to be obtained in gonococcal arthritis. In the treatment of syphilis, too, sufficient time has now elapsed to show that a combination of the fever cabinet with injections of tryparsamide and bismuth is attended with much success in securing improvement in cases of G.P.I.

Perhaps the most important development in anti-syphilitic therapy has been a fairly extensive trial of methods designed to intensify and to shorten the treatment. To this end, a group of early (primary and secondary) cases has been dealt with by a combination of massive arsenical drug therapy with fever therapy, and the results of this technique are now being assessed. In these times of emergency, it is obviously of the greatest importance that every effort should be made to effect the most rapid cure possible, especially in such cases as sailors or other essential participants in the war work.

**War Conditions.**—The increase of early infectious syphilis noted in the 1941 report has continued, so that the numbers of cases of primary and secondary syphilis, in both men and women, now show for 1942, figures which represent an increase of over 500 per cent. on the 1938 totals. The following table giving the numbers of these cases for the last five years shows the marked increase from 1938. It will be noted that the number of infected women has shown a greater proportionate rise than the corresponding figure for men.

#### Early Syphilis.

Year.					Males.	Females.	Total.
1938	...	...	...	...	94	30	124
1939	...	...	...	...	137	62	199
1940	...	...	...	...	142	88	230
1941	...	...	...	...	345	87	432
1942	...	...	...	...	445	183	628

The next table will show that the total number of new cases of syphilis, including old-standing cases, shows a much less striking increase (43 per cent when 1942 is compared with 1938), and comparison with the previous table shows that the increase is entirely due to the greater numbers of early infections, the decrease in the old-standing cases reflecting the efficacy of treatment in preventing the development of the later tertiary (cardio-vascular and central nervous) sequelæ.

#### Total New Cases of Syphilis.

Year.					Males.	Females.	Total.
1938	...	...	...	...	342	300	702
1939	...	...	...	...	321	423	744
1940	...	...	...	...	328	384	712
1941	...	...	...	...	550	362	912
1942	...	...	...	...	690	392	1,082

With regard to gonorrhœa, the numbers of new cases in men are high as compared with 1939, but the new female cases coming to the clinics have not increased



appreciably—a very noteworthy observation. Thus it comes about that the total new clinic cases of syphilis (namely 1,082) now approximate closely to the total new clinic cases of gonorrhœa (namely 1,113). This finding is in striking contrast to the generally accepted view that gonorrhœa is many times commoner than syphilis, and forces the conclusion that only a fraction of these gonorrhœal infections are coming to the clinics either for treatment or for testing for cure. This fact would also seem to constitute a strong argument in favour of compulsory notification, which would ensure that the public health authorities obtained reliable statistics of the incidence of a disease which is undoubtedly much more prevalent, especially in women, than the clinic figures indicate.

#### New Cases of Gonorrhœa.

Year.				Males.	Females.	Total.
1938	...	...	...	780	288	1,008
1939	...	...	...	561	242	803
1940	...	...	...	609	205	814
1941	...	...	...	803	284	1,187
1942	...	...	...	835	278	1,113

The next table records the distribution among the different classes of the population of acute venereal infections in men.

#### Distribution of Acute Infectious V.D. in Men among the different classes of the Population.

Acute Syphilis Cases				Gonorrhœa Cases			
...	...	445		...	...	835	
Proportion of Grand Total due to—				Proportion of Grand Total due to—			
Seamen (British and Foreign)				49·20 per cent.			
British Seamen (Navy and Merchant)				43·00 „			
Foreign Seamen (Navy and Merchant)				6·2 „			
British Navy				31·1 „			
British Civilians (Non sea-faring)				40·4 „			

This table shows that 67·6 per cent. (66·4 per cent. in 1941) of the acute syphilis in men and 49·2 per cent. (48 per cent. in 1941) of the gonorrhœa cases occur in sailors. The comparable figures for 1941 indicate that there has been no material change in the state of affairs then obtaining, namely that seamen account for nearly 70 per cent. of the fresh syphilis and approximately 50 per cent. of the gonorrhœa.

**Jaundice and Hepatitis.**—A factor of considerable significance which falls to be recorded in connection with war conditions is the increase of jaundice in patients receiving anti-syphilitic injection therapy. This jump in the incidence of jaundice is not by any means peculiar to the local clinics, but has been experienced all over the country, and has occasioned many conferences and much perturbation among venercologists. To some extent the etiology has not yet been fully elucidated, but from the multiple enquiries the following factors have emerged :—(1) minute quantities of a toxic substance (*e.g.*, in anti-yellow fever vaccine or immune serum)

administered by injection may determine jaundice ; (2) while there are circumstances suggesting the transmission from one patient to another (*e.g.*, from a husband to a wife both attending for anti-syphilitic treatment), of an infecting agent causing the jaundice, yet gonorrhœa patients attending the same clinic are relatively immune. Doubtless war-time restrictions have rendered diets poorer in such protective foods as milk, eggs, meat, cheese, green vegetables and citrus fruits, yet, even before the war began, there had been outbreaks of jaundice in anti-syphilitic clinics.

It seems pertinent to observe that, since the publication in 1935 of a League of Nations Bulletin containing the results of an international conference convened to determine the requirements of adequate therapy and recommending intensive treatment schedules ("Unit Courses"), the arsenical drugs have been administered more continuously (*i.e.*, without the previously conventional rest intervals during a course), and in higher sustained dosage.

Undoubtedly, both the arsenical and bismuth drugs used against syphilis exert a toxic action on the liver, and one plan adopted in countering the prevalence of jaundice has been to render the unit courses less intensive by omitting the third, fifth and seventh injections of the customary ten weeks' course. Doubtless, too, numerous other causes, such as alcohol, are operative, and the etiology is probably compounded of many factors.

In connection with this so-called post-arsphenamine jaundice, it has also to be remembered that accounts have been published (*B.M.J.*, 17th Jan. 1942, and 17th Oct. 1942) of localized outbreaks of "Infectious Hepatitis," the clinical picture of which may or may not include jaundice ; and jaundice is common, perhaps increasingly common, in the general population quite apart from those attending V.D. clinics. Jaundice is apt to be especially prevalent in war-time, *e.g.*, in prisoners' camps, and its high incidence is a matter which merits the attention and investigation of all health authorities. Notification of cases occurring in general practice would facilitate the elucidation of this war-time health problem.

**Combating Spread of Infection.**—In the 1941 Report it was mentioned that further powers of control were desirable, and the continuance during 1942 of the steadily rising incidence seemed likely to impel the competent authorities towards introducing new measures. As the year advanced and reports of mounting figures continued to emanate especially from the active seaports, it became evident that there would be a call for increased activity in all the existing measures, and that there was fast developing a situation which would constitute an indication for the introduction of new procedure to meet the growing menace. Accordingly the new Defence Regulation 33B came as no surprise. Under this Regulation, power of compulsion in the application of examination and treatment could be exercised in the case of a suspected source of infection named as such by two different consorts who had become infected.

It seems reasonable to suppose that Regulation 33B was framed as a tentative and experimental measure. The class which the regulation seeks to control is the

relatively small but pernicious group of obstinate and incorrigible moral defectives, both male and female, who are responsible for spreading an amount of infection quite out of all proportion to their numbers.

Perhaps the most important aspect of the legislation which has produced 33B is that of its influence in preparing the way for a more comprehensive measure. It requires to be emphasised that much of the opposition to compulsory notification and treatment is based on the presumption that such notification, as applied to venereal disease, would be precisely similar to the compulsory notification of other infectious diseases such as smallpox or typhoid fever, that is to say notification involving the reporting to the Medical Officer of Health of the patient's name and address. But it seems more probable that the procedure would be such as to preserve the anonymity of the individual by the use in reporting the case of identifying numbers or letters, or noms-de-plume, and that reporting of name and address would not occur except in the unusual event of persistent default defying all attempts at persuasion. With such safeguarding, the arguments in favour of compulsory notification and treatment seem heavily to outweigh those against it. The statistical and other information secured under a compulsory regime would be of incalculable, but probably enormous, value to local and national health authorities in their anti-venereal campaigns.

In the administration of the Edinburgh V.D. Scheme, effort has been made to render Regulation 33B effective by inviting the co-operation of all concerned, including the Services medical officers, in supplying the necessarily detailed information about sources of infection. Particulars received have already been actively and successfully followed up by the nurse almoner in a not negligible number of instances.

**Acknowledgments.**—The operating of the inductotherm fever cabinet, busily employed throughout the year, has imposed much extra responsibility and work on the doctors and nurses. The increased numbers of patients have been handled with energy and efficiency alike by the medical, nursing, clerical and almoner staff.



## SCHOOL MEDICAL SERVICE.

### REPORT BY THE SCHOOL MEDICAL OFFICER.

The general impression, obtained in school and clinic, that the standard of cleanliness has improved is supported by statistics. The following figures for the past three years show how the incidence of nits and vermin has fallen :—

		Inspections.	Nits and Vermin. Per cent.
1939-40	...	97,841	18·7
1940-41	...	63,469	8·1
1941-42	...	66,567	6·7

Further evidence of this improvement is to be found in the standard of whether or not a child is fit for evacuation at the time of inspection. This standard was introduced in 1939-40 and has been retained since for purposes of comparison. Those with "Slight Defect" could be rendered "Fit" in a few hours. Those with "Marked Defect" would require to be detained for some days in hostels or would require special evacuation arrangements.

			1939-40	1940-41	1941-42
Examinations	...	...	33,792	39,720	40,151
Fit	...	...	60·1 per cent.	70·6 per cent.	75·1 per cent.
Slight Defect	...	...	14·9	21·3	18·8
Marked Defect	...	...	24·8	8·0	5·9

Nevertheless, there is a core of careless and incompetent parents who give much needless trouble to medical, sanitary and teaching staffs and seriously interrupt work in school.

It will be interesting to test the new legislation of the Education (Scotland) Act, 1942, which, by repealing Section 6 of the 1908 Act, leaves all action regarding this matter to the Children Act, 1908 and the Scabies Order, 1941.

**Scabies.**—Four First-Aid Posts were opened during the year for the treatment of Scabies, namely, Pleasance and Royston on 18th March, Craigmillar on 23rd March and Mill Lane on 6th May.

From these dates to the end of the year 1,611 cases were treated, but treatment was suspended during the vaccination campaign. To these cases are to be added 2,109 others treated at High School Yards and Leith Clinic, giving a total of 3,720.

The ages of those treated were :—

0—5, 510 ; 5—15, 2,844 ; over 15, 366.

During the same period, 2,894 children were reported as being absent from school because of Scabies, so that 98·3 per cent. of the children availed themselves of clinic facilities for treatment. In many instances, cases were referred by private practitioners.

**Co-operation of Teaching Staff.**—I would again record my appreciation of the great assistance given in medical matters by the teaching staff, despite the increased call on their time and energy in tasks associated with the national effort.

I feel that the interest of the teaching staff in the physical and mental well-being of their pupils is not, in general, sufficiently realised.



## SUMMARY OF STATISTICS.

### MEDICAL INSPECTION AND TREATMENT.

Routine (age groups) Inspections	...	...	...	...	...	...	...	14,672
Special Inspections—								
In Schools	...	...	...	...	...	...	...	11,673
In Classrooms	...	...	...	...	...	...	...	22,425
In Clinics (Doctors)	...	...	...	...	...	...	...	6,302
In Clinics (Nurses)	...	...	...	...	...	...	...	28,286
In Clinics (Seabies)	...	...	...	...	...	...	...	23,734
Evacuation	...	...	...	...	...	...	...	2,060
For Vision and Hearing (7 year olds)	...	...	...	...	...	...	...	4,549
								<u>99,029</u>
								<u>113,701</u>

**Diphtheria Immunisation** ... 4,182

Vaccinations ... 2,672: Arms read 2,596: re-vaccinations 398

#### Cleanliness of Children.

##### Percentage incidence of nits and Vermin.

		1939-40		1940-41		1941-42	
		Exd.	Per Cent.	Exd.	Per Cent.	Exd.	Per Cent.
Routine examinations	...	6,570	11.2	15,234	8.8	14,673	8.03
Special cases in Schools	...	13,961	11.2	8,515	5.0	11,673	4.3
Class exams., M.Os.	...	—	—	2,610	16.7	9,795	10.4
„ „ Nurses	...	77,310	20.5	28,021	3.4	22,425	6.5
12 Selected Schools	...	—	—	6,729	27.2	—	—
Holidays (Dining Centres)	...	—	—	2,360	6.7	8,001	4.1
		97,841	18.7	63,469	8.1	66,567	6.7

Heads compulsorily cleansed ... 610

**Neglected Children.**—49 warning notices were served upon parents in connection with various forms of alleged neglect of their children.

**Home Visits by Nurses** ... 827

#### Defective Children—

No. of children examined by Medical Psychologist:—

For admission to Special Schools	...	...	...	...	...	161
Backward	...	...	...	...	...	15
Dull	...	...	...	...	...	150
For further consideration	...	...	...	...	...	52
Ineducable	...	...	...	...	...	46

Total number examined ... 424

No. of children resident in the following Institutions:—

*Blind—*

Royal Blind School ... 22 (Boys, 12; Girls, 10)

*Deaf—*

Donaldson's School ... 35 (Boys, 11; Girls, 24)

*Deaf and Blind—*

St. Vincent's R.C. School ... 6 (Boys, 5; Girls, 1)

*Epileptic—*

Colony for Epileptics ... 2 (Boys)

*Mental Defectives—*

St. Joseph's R.C. Institution ... 4 (Boys, 3; Girls, 1)

Gogarburn Institution ... 31 (Boys, 26; Girls, 5)

Larbert Institution ... 1 (Boy)

Total ... 101

21 Adults (16 Men and 5 Women) are Resident Trainees in the Royal Blind Asylum.

**Examinations by Specialists—**

Oculists ... ..	2,131 (glasses prescribed in 2,098 instances)
Aurists ... ..	785 (774 recommended for operation)
Skin ... ..	130

**Inspections and Treatment by Dentists—**

<b>Dental Clinics :</b>	
Inspected ... ..	21,352
Treatment offered ... ..	15,038
Accepted ... ..	7,470 (8,693 attendances)
Defaulted ... ..	3,636
Emergencies ... ..	2,168 (2,559 attendances)
<b>At Camps, etc :</b>	
Inspected ... ..	1,512 (treated 809)

**Child Guidance—**

Cases referred to Child Guidance Clinics ...	58
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**Infectious Diseases—**

Absences from School due to Infectious Disease	22,405 (of which 3291 were contacts).
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**Court Cases—**

Number examined ... ..	63
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**EVACUATION.****Total number of Edinburgh Children in reception areas—**

December 1940 ... ..	4,500
December 1941 ... ..	3,700
June 1942 ... ..	3,268

Number of unaccompanied children evacuated during the year (this includes 188 sent to Middleton and 143 sent to Broomlee) ... .. 1,202

Number of mothers with children evacuated during year ... .. 144

Number of children accompanied by their mothers evacuated during year ... .. 249  
(These figures include 3 mothers and 6 children evacuated to Eire and 10 mothers and 19 children evacuated to Northern Ireland.)

**Number of children from other Evacuation Areas billeted in Edinburgh—**

(a) Of school age ... ..	63
(b) Below school age ... ..	46

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109
**P.D. and M.D. Children evacuated—**

Humble ... ..	48 (P.D.)
Middleton House ... ..	47 (P.D.)
Springwood Park ... ..	40 (21 P.D. ; 19 Myopes)
Cowdenknowes ... ..	20 (P.D.)
Smeaton House ... ..	45 (M.D.)

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200

**Diabetic Children.**—Through the kindness of the Renfrewshire authorities, six diabetic children have been evacuated to Wiston Lodge and are included in the Refrewshire Diabetic Scheme.

**Spectacles—**

Spectacles provided by Education Authority—913 pairs (107 pairs provided free ; 806 paid for by parents).

**Meals and Milk—**

<b>Meals to 15/5/42</b> ... ..	1,810,820
Average cost per meal ... ..	3·81d. (2·20d. food ; 1·61d. Admin.)
Gross cost ... ..	£28,788
Net cost ... ..	£19,690
Applications for free meals ... ..	1,158 applications by parents or guardians.

Applications granted ... .. 834

<b>Milk :</b> On payment of $\frac{1}{2}$ d. ... ..	9,171,126	} (one-third pint bottles)
Free ... ..	1,567	

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## CITY HOSPITAL FOR INFECTIOUS DISEASES.

### REPORT BY THE MEDICAL SUPERINTENDENT.

During 1942, 4,824 patients were admitted to the City Hospital, 308 of these suffering from tuberculosis. Of the fever patients 53 were admitted at the request of neighbouring local authorities, while 274 were service patients. The greatest number under treatment in hospital on any one day was 634 on 9th November, and the lowest 325 on 23rd June, the average daily number under treatment being 478. The services undertaken for adjacent local authorities are greatly underestimated by the number for whom admission was officially sought by the various Medical Officers of Health. Many cases of an acute nature are sent from a wide area to the general hospitals in Edinburgh which on arrival are found to be suffering from one or other of the acute infections and are immediately directed to the City Hospital. As notification is not made till the patient is seen in Edinburgh the charge for their maintenance and treatment falls on the Edinburgh ratepayer. Presumably this anomaly would disappear under a regionally organised hospital service.

**Outbreak of Smallpox.**—The most important epidemiological event of the year was the smallpox outbreak which occurred in the last quarter. It was not entirely unexpected by those whose duty it is to keep such visitations in mind, and though no special exhortations had been received from the central health authority on the subject, the hospital was not unprepared when the emergency occurred. The work entailed by the hospitalisation of 33 cases of variola major and 21 suspected cases in which the diagnosis was not confirmed was out of all proportion to these relatively small numbers. Since a special report on all phases of the outbreak, including the part played by the City Hospital, is in course of preparation no further reference to it is made in this report.

**Increased Admissions.**—The increase in our number of admissions by 885 patients over 1941 was due chiefly to the large increase in our scarlet fever cases which numbered 1,535, a figure which has been exceeded only twice in the last fifteen years. Diphtheria, measles, and puerperal sepsis admissions all showed an increase also, the most notable decrease being recorded in the cerebro-spinal fever admissions which fell to 79 as compared with 317 and 211 in 1940 and 1941 respectively.

**Administration.**—Under war conditions this has continued to give rise to many problems mainly concerned with staffing and the supply of food and other commodities. The recruitment of medical staff has been very much a hand to mouth affair and the recruitment of sufficient nurses to maintain our nursing services has been difficult. No improvement has resulted from the various representations made in respect of domestic staff and it is a common experience in the course of a round of the hospital to see sisters and probationers scrubbing floors and passages and carrying food from the main kitchen to the wards. A number of wards have been without domestic assistance for months.

**Staff Replacements.**—Mention was made in last year's report of the calling up of the male members of the domestic staff. These were replaced where this could be done suitably by women employees, for example in the telephone and enquiry room, but the latter are now being called up in turn for the women's services in spite of their rather specialised type of work. Since the resources of the Ministry of Labour in respect of replacement of male staff are now very restricted the substitutes for porters supplied by that Ministry have been most unsatisfactory, their employment in the hospital having led to unfortunate incidents on two occasions.

**Food Problems.**—Patients and staff dietaries have required to be carefully watched during the year and while a certain amount of experimentation in respect of nutrition may be permissible and indeed advantageous as far as those with normal healthy appetites are concerned, patients with severe advanced tuberculosis do not take kindly to new ideas on the subject of food, nor to the restrictions on meat, fats and sugar imposed by rationing.

**Medical Instruction.**—Two hundred and twenty-eight undergraduates attended demonstrations in acute infectious diseases in the hospital, these being divided into six sections involving approximately 100 hours' teaching. One systematic course in hospital administration and clinical practice for the diploma in Public Health was attended by 13 graduates. Arrangements were also again made for students from the Polish Medical School to visit the hospital for instruction by their own teachers.

**Training of Nurses.**—Of 44 nurses who completed their training during the year, 35 were granted State Registration as fever nurses after examination. Twenty-five went to various general hospitals for general training, 3 went as staff nurses to other isolation hospitals and 2 joined the Civil Nursing Reserve. Two left to be married.

**Acknowledgments.**—When so many have contributed towards the efficient functioning of the hospital under difficult circumstances it seems invidious to mention particular individuals. The hospital received the public congratulations of the Department of Health for the work carried out during the smallpox outbreak, whilst those actually engaged in the smallpox wards showed devotion to duty and cheerfulness in keeping with the highest standards of the nursing profession. Those not specially chosen for this onerous work were not less deserving of praise since their efforts with depleted staffs in the remainder of the hospital made possible the special services rendered by their colleagues. It is therefore a special pleasure to record that everyone, including the senior administrative staff, has been most helpful in all the hospital activities and I am most grateful for their continued support.



# MUNICIPAL GENERAL HOSPITALS.

## WESTERN GENERAL HOSPITAL.

### REPORT BY THE MEDICAL SUPERINTENDENT.

The following is a report of the work carried out at the Western General Hospital during the year 1942.

All departments were very busy throughout the year and there were rarely periods during which there was not a short waiting list for medical and surgical cases. The Maternity Wards dealt with 1,089 cases, 925 babies being born, twice the number in 1940. In the X-Ray Department 5,127 examinations were made; it is of note that of these, 2,158 came from the Paderewski Hospital and 505 from other hospitals, and that 102 Norwegian patients were examined here before the inception of the Norwegian X-Ray Unit. At the Surgical Follow-Up Department 1,767 cases were examined, entailing in all 7,998 separate attendances; this is again an increase of 66 per cent.

In May the hospital started admitting cases from the waiting list of voluntary hospitals by arrangement with the Department of Health, and by the end of the year 152 of these cases had been admitted; 116 were surgical patients and in the main came within the younger age groups. It is a most satisfactory feature that the hospital was in this way able to help in treating a class of patient that is at this time of great economic value to the country.

The Paderewski Hospital was utilised to the full, admitting in all 1,203 patients and dealing with 5,415 out-patients. In the Dental Department alone 2,835 patients received treatment.

The maintenance of an adequate domestic staff has been a matter of extreme difficulty and in fact has latterly been impossible. Even by engaging daily workers to undertake duties normally performed by resident staff, and in some cases giving them part-time employment, we have fallen far below our normal establishment of domestic staff. The position is steadily deteriorating and shows no immediate promise of improving. In this respect the nursing staff are to be congratulated for the way in which they have accepted the deficiency, and in many cases undertaken some of the domestic duties.

In conclusion I have much pleasure in according my thanks to the Matron for her valuable assistance at all times, and to the whole of the medical and administrative staff for their wholehearted co-operation.

### Statistics for the Year 1st January to 31st December 1942.

				Remaining 1st Jan.	Admitted.	Discharged.	Died.	Remaining 31st Dec.
Adults	{	Males ... ..		40	740	610	120	50
		Females ... ..		81	1,928	1,829	100	80
Children	{	Boys ... ..		33	738	706	38	27
		Girls ... ..		19	662	650	17	14
Totals ... ..				173	4,068	3,795	275	171

Number of cases treated ... .. 4,241

Total Beds ... .. 430 + 110 Paderewski  
Hospital.

Average number of occupied beds ... .. 209

Average length of stay, in days, per patient... .. 19

Highest daily number of patients ... .. 244—12/5/42.

Lowest „ „ „ ... .. 168— 3/1/42.

Table to show the results of Treatment or Termination of Illness.

Cured ... ..	2,669	Not improved ... ..	379
Improved ... ..	747	Died ... ..	275
Remaining under treatment ... ..	171		

## MATERNITY DEPARTMENT.

Number of cases treated ... ..	1,089
„ „ admitted (includes 3 babies with 3 mothers) ...	1,059
„ „ discharged ... ..	1,061
„ „ delivered (810 normal, 90 abnormal) ...	900
„ post-partum puerperal admissions ... ..	3
„ deaths, mothers 3, infants 10 ... ..	13
„ babies born (includes twins) ... ..	910
„ „ stillborn ... ..	15

There have been 1,141 ante-natal cases examined during the year. Of these, 964 were admitted. Abortion cases totalled 25, and 67 other cases of complicated pregnancy were not confined. The abnormal deliveries included 45 by forceps and 9 cæsarian section.

The causes of maternal deaths were as under :—

1. Eclampsia.
2. Miliary tuberculosis.
3. Third Stage Hæmorrhage and Profound Anæmia.

## CHILDREN'S WARDS.

1. Premature babies ... ..	3
2. Rheumatism, Diseases of Nutrition and other General Diseases	18
3. Diseases of the Blood and Blood-forming Organs ... ..	5
4. „ Nervous System and Sense Organs ... ..	9
5. „ Respiratory System ... ..	50
6. „ Digestive System ... ..	35
7. Non-Venereal Diseases of Genito-Urinary System ... ..	5
8. Diseases of Skin and Cellular Tissue ... ..	80
9. Congenital Malformations ... ..	7
10. Mental Deficiency ... ..	2
11. Convenience cases (healthy) ... ..	1
12. Tonsillectomy cases ... ..	2
13. Surgical Cases ... ..	8
14. Convulsions of unknown origin ... ..	3
15. Tuberculosis (notifiable cases) ... ..	1
16. Glands of neck (not operable) ... ..	1
17. Various unclassified diseases ... ..	14

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## MASSAGE AND ELECTRO-THERAPY DEPARTMENT.

The total number of patients treated during the year was 827, of which 734 were cured and improved ; 48 were not improved, and 39 were still under treatment at the end of the year ; 6 patients died. During the year 8,002 treatments were given, as follows :—

Massage ... ..	2,652
Galvanism and Faradism ... ..	347
Diathermy (Short Wave) ... ..	22
Infra-red ... ..	1,340
Ultra-Violet Artificial Sunlight ... ..	746
Re-education Exercises ... ..	2,895

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8,002

(Included in above are 111 Polish cases.)

**OUT-PATIENT DEPARTMENT.**

The number of patients treated is as follows :—

Surgical cases	...	...	...	...	1,767
Medical cases	...	...	...	...	140
					<u>1,907</u>
Number of Attendances	...	...			<u>7,998</u>

**PADEREWSKI HOSPITAL.**

Statistics for the Year 1st January to 31st December 1942.

Admissions—1,203

Discharges—1,085

Deaths—12

**Out-Patient Department.**

Number of patients treated	...	...	5,415
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**Dental Department.**

Number of patients treated	...	...	2,835
„ „ daily visits	...	...	6,939

**Operating Theatre.**

Number of major operations	...	...	157
„ minor „	...	...	138
			<u>295</u>

**EASTERN GENERAL HOSPITAL.****REPORT BY THE MEDICAL SUPERINTENDENT.**

This report deals with the work of the Eastern General Hospital during the year 1942. The hospital serves a dual purpose and is available for the admission and treatment of both civilian sick and air raid casualties or other Scheme patients. As in 1941 there were, fortunately, few admissions resulting from enemy action and Scheme patients were also few in number. No adequate test of the elaborate arrangements to cope with emergency work was therefore possible, although practices seemed to indicate that the arrangements were satisfactory. The statistics given below represent the results of the work done for the civilian sick. In assessing them allowance must be made for the fact that many patients on admission were either dangerously or fatally ill. All things considered the results are encouraging and satisfactory.

Some changes were noted during the year. Firstly, the number of patients treated increased by 33 per cent. compared with 1941, secondly the patients were more genuinely ill in a medical sense than in former years, and thirdly a greater variety of general medical conditions were seen in the wards. Skin diseases,

particularly scabies, again increased in number and as no extra accommodation could be provided to cope with them their increased turnover represented extra hard work on the part of the staff. Deficiency disease, particularly scurvy in elderly males, showed a slight increase compared with previous years, but it may be said that this condition apart, the nutritional state of the patients seemed to be unaffected by wartime restrictions.

The operating theatres continued to stand by equipped and ready for use for casualties and were used on a few occasions mainly to deal with such surgical emergencies as were admitted. This work, however, was so little that it barely relieved tedium and stagnation and great difficulty was experienced in maintaining a theatre staff. The other departments associated with the medical work of the hospital, *i.e.*, X-ray, massage and chiropody all had a busy year.

The maintenance of an adequate nursing and domestic staff was difficult. Trained staff nurses were never available at any time in sufficient numbers to cope with the work. Junior nurses, while often sufficient in number, suffered from two disadvantages. The first of these was that they consisted largely of young women entering the profession for the first time and whose lack of training and experience largely nullified their enthusiasm. The second disadvantage lay in the fact that their numbers were being constantly depleted by the resignations of those who wished to go elsewhere for a nurses' training, the vacancies being filled by further newcomers. Briefly, therefore, the nursing side of the hospital suffered not only from the general lack of nurses but very specially from our inability to give a training in nursing. Despite this the standard of nursing throughout was very good.

On the domestic side of the hospital matters became steadily worse. It was almost impossible to obtain or retain resident domestic staff. Vacancies were filled by engaging outdoor daily workers but even this remedy barely served to cure the ill. The problem, urgent in 1941, is one which still requires investigation and suitable action by high authorities as it is very important that the domestic work of the hospital be carried on efficiently. Again the valiant efforts of the staff remaining resulted in the hospital being maintained fairly well.

Amongst all the remaining items which could call for comment two are particularly worthy of mention. One is that the general health of the entire resident staff was very good and the other and, I think, related factor is that the dietary of both patients and staff was maintained at a high level.

The review cannot be complete without paying a tribute to the service given by voluntary personnel as clerkesses, stretcher bearers, messengers, etc., and it is hoped that this service will continue despite the other calls on these people's time.

In conclusion I wish to take this opportunity of thanking all members of the hospital staff for their help during the year. Their willing assistance eased the task of running the hospital. Thanks must also be extended to all those outwith the hospital staff, but whose work meant contact with us, for their help.



### MASSAGE DEPARTMENT.

Number of patients treated ...	...	...	...	...	...	180
Number of patients discharged	...	...	...	...	...	123
Number of patients remaining	...	...	...	...	...	26
Cured	...	...	...	...	...	37
Improved	...	...	...	...	...	63
Not Improved	...	...	...	...	...	18
Died	...	...	...	...	...	5
						<u>123</u>
Massage	...	...	...	...	...	2,195
Paradism	...	...	...	...	...	73
Radiant Heat	...	...	...	...	...	8
Galvanism	...	...	...	...	...	457
Ionization	...	...	...	...	...	—
Exercise	...	...	...	...	...	2,110
U.V.R.	...	...	...	...	...	352
Infra Red	...	...	...	...	...	1,708
Sinusoidal	...	...	...	...	...	80
						<u>6,983</u>

### Classification of Discharges for the Year ending 31st December 1942.

							Male.	Female.
Infectious and Parasitic Diseases	...	...	...	...	...	...	16	15
Cancer and other Tumours	...	...	...	...	...	...	7	14
Rheumatism, Diseases of Nutrition and other General Diseases	...	...	...	...	...	...	47	25
Diseases of the Blood and Blood Forming Organs	...	...	...	...	...	...	1	10
Chronic Poisoning	...	...	...	...	...	...	6	1
Diseases of Nervous System and Sense Organs	...	...	...	...	...	...	42	56
Diseases of Circulatory System	...	...	...	...	...	...	84	52
Diseases of Respiratory System	...	...	...	...	...	...	47	35
Diseases of Digestive System	...	...	...	...	...	...	16	10
Non-venereal Diseases of Genito-Urinary System	...	...	...	...	...	...	14	7
Diseases of Pregnancy and Childbirth	...	...	...	...	...	...	—	—
Diseases of Skin and Cellular Tissue	...	...	...	...	...	...	231	164
Diseases of Bones and Organs of Locomotion	...	...	...	...	...	...	5	10
Congenital Malformations	...	...	...	...	...	...	—	—
Diseases of Early Infancy	...	...	...	...	...	...	—	—
Senility	...	...	...	...	...	...	4	10
Violence	...	...	...	...	...	...	5	1
Nil.	...	...	...	...	...	...	—	3
							<u>525</u>	<u>413</u>
Total	...	...	...	...	...	<u>938</u>		

### Statistics for the Year 1st January to 31st December 1942.

				Remaining 1st Jan.	Admitted.	Discharged.	Died.	Remaining 31st Dec.
Males	...	...	...	78	678	525	167	64
Females	...	...	...	69	530	413	125	61
Total	...	...	...	147	1,208	938	292	125

Number of cases treated	...	...	...	1,355
Total number of beds	...	...	...	426
Average number of occupied beds	...	...	...	134
Highest daily	„	„	„	169—14/5/42
lowest	„	„	„	94—28/9/42
Average length of stay in days per patient	...	...	...	40
Number of post-mortems	...	...	...	23

Table to show the Results of Treatment.

	Cured.	Improved.	Not Improved.
Males ... ..	302	193	30
Females ... ..	214	161	38
Total ... ..	516	354	68

Remaining under treatment ... .. 125

### SOUTHERN GENERAL HOSPITAL.

#### REPORT BY THE SUPERINTENDENT.

In my previous Reports I have stressed the difficulties of the hospital created by the shortage of nursing and domestic staffs ; that these difficulties have been overcome is a tribute to the staff generally whose goodwill and co-operation have eased a situation which tended to become impossible.

In so far as the domestic problem is concerned, the employment of daily workers has helped ; it should be appreciated, however, that the situation of the hospital does not lend itself to recruitment of this type of employee. Those employed travel a considerable distance and unfortunately absenteeism is very common.

The only source of recruitment of nurses to non-training school hospitals is through the Civil Nursing Reserve, and while I appreciate very fully the admirable work done by those nurses, it is apparent that very many of them feel that they have been misled and did not appreciate that they would be required to nurse the ordinary civilian sick and particularly the more aged types being admitted here. Reference to the statistical report attached will show that while the total of admissions for the year is substantially less than in 1941, the average number of patients resident is higher and the stay in days per patient has risen from 35 to 50. It is apparent that the need for hospital accommodation for this type of patient is becoming greater year by year, and while I hesitate to attempt any forecast of future hospital policy, I would like to stress the fact that constant nursing of chronic and aged patients cannot be other than depressing. It seems to me that greater effort should be made to provide that a proportion at least of the admissions should be of a more interesting nature. Some effort has been made in this direction but the very few Infirmary waiting list cases received have been little different from normal Public Health admissions.

The accommodation placed at the disposal of the War Office for the setting-up of a reception station as an A.T.S. unit was previously reserved for civilian casualties. The first patient was admitted on 6th July and there have been 390 admissions in all. This unit runs very smoothly and presents no problems.

The difficulties of providing an interesting and varied diet for staff and patients are not less than they were, but I am glad to say that they have been very successfully overcome by the Matron and her staff.

## NORWEGIAN HOSPITAL.

Towards the end of 1941 it was suggested by the Department of Health that part of the accommodation set aside for the reception of casualties should be utilised to provide a hospital for Norwegian service and civilian patients, medical and surgical. Negotiations were completed and the first patient was admitted on 9th February, since when the hospital has been extremely active and a total of 1,019 have been admitted. There is in addition a large out-patient department. The hospital is staffed by Norwegian doctors and nurses. That difficulties would arise was only to be expected; I am glad to report, however, that generally speaking the association has been a most amicable one.

It is worthy of note in regard to the setting-up of this hospital, and this is a matter which again touches the recruitment of nurses, that one of the inducements offered us when the idea was first suggested, was that there would be as a result more active and interesting work for our nurses, and in particular the theatre staff. I regret to say that this is the most disappointing aspect of the whole arrangement. Not only do the Norwegian surgeons prefer to work with their own nurses, but they have considered it necessary, in preparation for the return to their own country, to commence training of their probationer nurses, and as a result our young nurses get no opportunity of attending operations, and our theatre staff merely prepare for and clean up after.

I must confess that this has been a great disappointment to me and the staff generally. That it has been possible to work under such conditions and keep an efficient theatre staff ready for any emergency is a tribute to the Matron, whose handling of this very delicate problem is beyond praise.

An interesting aspect of this extremely commendable desire of the Norwegians to train their probationers is the effort they are making to come to an arrangement with the Edinburgh Royal Infirmary, from whom they hope to get facilities for teaching. Whether or not this will materialise, I cannot at the moment say, but if it does, then I fail to see why some such arrangement cannot be made for the encouragement of our nurses. At this date there are 47 V.A.D. and auxiliary nurses on the staff here. These nurses have had very little training and entered the profession primarily for the duration of the war. I am confident, however, that given proper encouragement many of them would stay at nursing, and it seems to me that some effort should be made in this direction.

It is interesting to record that during the year the hospital was visited by H.R.H. The Princess Royal, and by King Haakon and the Crown Prince of Norway.

In conclusion, I would like to take this opportunity of thanking every member of the hospital staff for the help I have received from them during the year. Their task has not been an easy one, but the condition of the patients is proof that their work is not only well done but appreciated. I would like also to pay tribute to the enthusiastic corps of stretcher bearers, now unfortunately considerably reduced, who have consistently throughout the year attended regularly for training.

## Statistics for the Year 1st January to 31st December 1942.

	Remaining 1st Jan.	Admitted.	Discharged.	Died.	Remaining 31st Dec.
Males ... ..	74	468	256	209	77
Females ... ..	80	294	157	127	80
Totals ... ..	154	762	413	346	157

Number of Cases treated ... .. 916

## Table to show the Results of Treatment or Termination of Illness.

Cured ... ..	29	Not improved ... ..	122
Improved ... ..	262	Died ... ..	346
Remaining under treatment ... ..	157		
Total beds—Public Health ... ..	162 (E.M.S.—198)		
—Norwegian Unit ... ..	128 (E.M.S.—146)		
—A.T.S. Unit ... ..	50 (E.M.S.—75)		
Emergency Casualty Beds—Equipped but unoccupied ... ..	138		
Average number of occupied beds—Public Health ... ..	137		
—Norwegian Unit ... ..	93		
—A.T.S. Unit ... ..	18		
Highest daily number of patients—Public Health ... ..	162 (27/7/42)		
—Norwegian Unit ... ..	126 (22/11/42)		
—A.T.S. Unit ... ..	26 (9/12/42)		
Lowest daily number of patients—Public Health ... ..	113 (22/ 2/42)		
—Norwegian Unit ... ..	7 (8/2/42)		
—A.T.S. Unit ... ..	5 (6/7/42)		
Average length of stay in days per patient (Public Health) ... ..	50		

## MASSAGE AND ELECTRO-THERAPY DEPARTMENT.

The total number of patients treated during the year was 246, of which 188 were cured and improved ; 54 not improved ; 4 patients died, and 13 were under treatment at the end of the year. During the year treatments were given as follows :—

Massage ... ..	2,068
Galvanism and Faradism ... ..	70
Diathermy ... ..	—
Infra Red and Radiant Heat ... ..	370
Ionization ... ..	—
Ultra Violet Artificial Sunlight ... ..	—
Re-education Exercises ... ..	1,880

## Staff Illnesses during the year.

Nurses ... ..	40	Maids ... ..	30
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## NORWEGIAN UNIT.

## Statistics for the period 9th February to 31st December 1942.

Admissions ... ..	1,019	Discharges ... ..	898	Deaths ... ..	6
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## A.T.S. UNIT.

## Statistics for the period 6th July to 31st December 1942.

Admissions ... ..	390	Discharges ... ..	380
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# GOGARBURN HOSPITAL.

## REPORT BY THE MEDICAL SUPERINTENDENT.

The Annual Report for Gogarburn Institution for the year 1942, as in the preceding two years, falls to be considered under two heads (1) The Mental Defective Colony, and (2) The Emergency Hospital.

### I. The Mental Defective Colony.

The following statistical tables show the changes which have occurred in the patient population during the year. Generally speaking there has been little change. The patient accommodation has been fully occupied during the year and the excess of admissions over the number of vacancies occasioned by discharges and deaths has been achieved by further diminishing the available space per patient. So far as possible the crowding up of patients beds has been restricted to the adult villas.

	Males.	Females.	Total.
Number of Patients on Register at 1st January 1942	191	242	433
Cases admitted during the year ... ..	25	24	49
Total cases under treatment ... ..	216	266	482
Cases discharged during the year ... ..	15	13	28
Cases transferred to other Institutions ... ..	—	2	2
Cases died during the year ... ..	4	3	7
Patients on Register at 31st December 1942 ...	197	248	445

The physical condition of the patients on admission was as follows :—

	Males.	Females.	Total.
In fair or average health and condition ... ..	14	12	26
In poor or indifferent health and condition ... ..	4	4	8
In weak or very weak health and condition ... ..	7	8	15
	25	24	49

The classification and age grouping of the patients admitted was as follows :—

Classification.	5—10 years.		10—15 years.		15—20 years.		20—25 years.		Over 25 years.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Idiot ... ..	...	2	1	...	...	...	...	...	...	...	1	2
Imbecile ... ..	1	1	1	1	...	...	1	1	...	1	3	4
Feeble-minded ... ..	5	1	9	4	6	5	...	5	1	3	21	18
Total—Males ... ..	6		11		6		1		1		25	
Total—Females ... ..		4		5		5		6		4		24

The following table shows the methods of disposal of the patients discharged from the Institution in the course of the year :—

	Males.	Females.	Total.
Discharged to their own homes ... ..	10	11	21
Transferred to other Institutions ... ..	—	2	2
Discharged on attaining the age of 16 years ...	5	2	7
	<u>15</u>	<u>15</u>	<u>30</u>

The number of deaths occurring in the course of the year was 7. The causes of death were as follows :—

	Males.	Females.	Total.
Diseases of the Central Nervous System ... ..	1	—	1
Diseases of the Cardiovascular System ... ..	1	2	3
Diseases of the Alimentary System ... ..	1	—	1
Diseases of the Respiratory System... ..	1	1	2
	<u>4</u>	<u>3</u>	<u>7</u>

It is again recorded that the long immunity from serious accidents affecting patients has continued during the year.

I am very grateful for the continued loyalty and support afforded me by all members of the staff.

## 2. The Emergency Hospital.

The following are the figures relating to the Emergency Hospital. As the figures show, the hospital has had a busy year, the majority of the patients coming from the armed forces. The results of treatment have been most encouraging, the great majority of the patients being returned, cured, to their Units. One outstanding feature of the year's work has been the increased number of cases from the Women's Services requiring treatment.

The emergency scheme in so far as it affects this hospital has continued to work well and harmoniously throughout the year. This has been achieved by the unsparing efforts of the nursing, medical and administrative staffs. To all I tender my grateful thanks.

In Hospital on 1st January 1942 ... ..	96
Admissions of Service Patients ... ..	1,691
Admissions of Civilian Scheme Patients ... ..	187
Total Admissions ... ..	1,878
Members of Services treated as Out-patients ... ..	818
Total number of patients treated during year ... ..	2,696
Discharges of Service Patients ... ..	1,669
Discharges of Civilian Patients ... ..	171
Total Discharges ... ..	1,840
Deaths of Service Patients ... ..	4
Deaths of Civilian Patients ... ..	2
Total remaining in Hospital on 31st December 1942 ...	128

## BANGOUR EMERGENCY HOSPITAL.

### REPORT BY THE MEDICAL SUPERINTENDENT.

#### General Statistics.

				Services.	Civilians.	Total
Admissions	...	...	...	3,591	1,212	4,803
Discharges	...	...	...	3,487	1,168	4,655
Deaths	...	...	...	22	38	60

These figures do not include the changes in East Fortune Sanatorium. Altogether 250 patients were received during the year from the Counties served by the Joint Sanatorium Board.

The admissions (4,803) show an increase of 1,851 over the figure for 1941, made up of 1,174 service patients and 677 civilians.

The service admissions included men and women from all three services, most of them sick or accidentally injured and only a comparatively small group resulting from enemy action in home areas. Towards the end of the year, however, parties numbering several hundreds were received direct from various overseas theatres of war.

The civilian admissions consisted partly of Edinburgh Royal Infirmary waiting list cases. These numbered 796.

**Tuberculosis.**—Towards the end of 1941, two new departments, gynæcology and surgical tuberculosis, were opened. In 1942, these departments were fully developed and the latter was thrown open to cases of surgical tuberculosis from Glasgow. In all, 120 beds are now available for this purpose, the great majority being occupied by Edinburgh patients.

An additional 90 beds were also set aside to form a “clearing station” for service patients suffering from pulmonary tuberculosis. To this centre patients are referred either from their Units or from other emergency hospitals for confirmation of the diagnosis, for boarding and for allocation to the sanatoria serving their home areas. One of these wards is partly staffed by nursing sisters from the Royal Air Force.

During the smallpox epidemic in Glasgow, 30 cases of pulmonary tuberculosis were transferred to Bangour from Robroyston Hospital to facilitate the control measures in the affected area. The transfer was meant to be temporary but in fact has formed the nucleus of a much larger scheme. To help to meet the pressing needs of Glasgow—and, to a lesser extent, other areas—210 additional beds have been allocated to pulmonary tuberculosis. It is anticipated that these wards which are at the moment undergoing modification (central heating, etc.), will be ready for occupation early in 1943.

The net result of these developments is that 1,000 casualty beds in the Annexe have been diverted to the treatment of tuberculosis in one form or another. Owing

to the need for more space per bed, however, the 1,000 casualty beds can only be replaced by 750 tuberculosis beds.

The surgical tuberculosis work is under the direction of Mr Walter Mercer, and Dr. Cameron, in addition to his work in the East Fortune Sanatorium Unit, acts as consultant to all the pulmonary wards. Closely allied to this work is the Thoracic Surgery Unit which was primarily intended for the treatment of chest injuries among air-raid casualties as well as chest wounds in the services. Fortunately, these have been few but the Unit has done some most useful work in disease conditions such as lung tumour. Dr. Ewart Martin, the Ear, Nose and Throat Specialist to the Hospital, co-operates with Mr Mercer and Dr. Cameron in this field.

Open-air balconies for four of the five surgical wards have been erected by the Department of Health and are a very real boon to the patients.

Two of the five surgical wards are occupied by children, a large proportion of them of school age. Accordingly, two teachers have been appointed to carry on their education. Their work is supplemented by the Occupational Therapy Department, though the therapists do not confine their attention to the children. The surgical tuberculosis wards and the clearing station have all been equipped with wireless. This welcome gift, like many others, was made through the good offices of Bailie John G. Banks.

**Plastic Surgery.**—In all 240 patients were admitted to this Unit during the year and 313 major operations were performed. An innovation was the opening of a children's ward in which several cleft palates were dealt with very successfully by operation followed by special speech training. There was a definite increase in the number of fractures of the bones of the face admitted for repair and also of cases of contraction of the eye socket following injury to the eye. While a considerable number of burns were admitted, it is felt that there must be many more in need of this specialised form of treatment. It should be generally understood that to secure the best results early treatment is essential. The scarring and contraction which result from burns are infinitely easier to control if taken in hand early.

**Brain Injuries.**—This Unit comprises two interdependent departments, one in Bangour and the other in the Edinburgh Royal Infirmary. All the operative work of the unit and the post-operative rehabilitation are done at Bangour, while certain special investigations are carried through at the Infirmary. These latter, *e.g.*, electro-encephalography, cerebral arterial radiography and radio-therapy, require costly apparatus which could not easily be duplicated.

The total number of admissions to the Bangour section during the year was 878, 420 from the services and 458 civilians. Major operations numbered 341, which figure represents a very substantial body of work. It has to be remembered that each operation involves the attendance of at least four of the medical staff for an average of five hours, while for the nursing staff each operation means a



whole day's work. Many minor surgical procedures incidental to investigation and treatment have to be carried through in addition to the more formal operative undertakings.

In the post-operative stages, great emphasis is placed on doing everything possible to rehabilitate the patient. To this end physio-therapy, speech therapy, occupational therapy and physical training are all employed. All these activities are under the control of specialists in each department, but their work is carefully co-ordinated by means of weekly staff conferences at which programmes are mapped out for new cases and old cases are reviewed and assessed.

As an indication of the success which attends these measures, it may be said that about three-fourths of the patients are rendered capable of resuming their former activities. Of the remainder, one-half are fit for some form of useful occupation. In this connection, acknowledgment must be made of the help received from the Ministry of Labour in finding suitable employment for those who must engage in a new sphere of work.

In one sense, the activities of the Brain Injuries Unit are in the nature of an enquiry into the physical and mental accompaniments and sequelæ of injury or disease of the central nervous system—a problem concerning which there is still much to learn. The research aspect of the work is encouraged by financial help from the Rockefeller Foundation, and has already resulted in the publication of several important papers. Apart from these papers, much material for future research is being accumulated and will be turned to good account in due course.

**Ear, Nose and Throat Unit.**—Preliminary steps are being taken to expand the scope of this unit so as to concentrate in Bangour all the operative work of the region in Army and Royal Air Force cases. Personnel from these services will have their preliminary examination in Edinburgh and then be referred, if operation is necessary, to Bangour. The unit will also deal with considerable numbers of civilians referred from the Royal Infirmary. To cope with this large intake, arrangements are in hand for the appointment of a specialist from each of the two services to act as visiting surgeon. The unit as a whole, however, will remain under the direction of Dr. Ewart Martin.

**Laboratory.**—The Laboratory is under the direction of Professor Mackie, with Dr. Purdie as the resident bacteriologist and a staff of four technicians. It is closely linked up with the University Laboratory and acknowledgment must be made of the ready help afforded by the latter in every difficulty. Similarly, every effort is made to maintain the closest co-ordination between the clinical staff of the Hospital and the Laboratory workers. The benefits of this liaison are obvious.

During the year the Laboratory established itself as a training centre for technicians selected for other E.M.S. appointments.

The range of work done in the Laboratory is ever expanding. Bacteriological, serological, hæmatological and biological examinations, many of them of a highly technical character, were carried through to the number of 13,992.

**Radiology.**—The following equipment is now in use :—

Victor 4-valve 500 Ma. Diagnostic Set.

Newton-Wright 2-valve Diagnostic Set.

Victor F3 Portable Units (2).

Dean Mobile Ward Unit.

Victor X-Ray Therapy Unit (60-140Kv).

Watson Mobilix Unit.

Sterling Dental X-Ray Unit.

Partly for security reasons, these Units are dispersed over widely separated parts of the Hospital.

During the year, 4,754 patients were examined. Of these 65 per cent. were service patients, the remainder civilian. Special investigations (Ventriculography, Encephalography, Bronchography and Retrograde Pyelography, etc.), were made in 756 cases.

**Physiotherapy.**—This department has had a busy year, giving 27,204 treatments. Its resources have been extended by the addition of short wave diathermy apparatus (gifted by the British Red Cross Society) and the installation of a wax bath. The old whirlpool bath—a relic of the last war—has also been reconditioned and is in regular use in the treatment of patients suffering from loss of voluntary control in one or other limb.

**Occupational Therapy.**—In all 1,213 patients benefited from the work of this department during the year. Under Miss de Brisay's guidance, it forms a valuable adjunct to more specifically surgical or medical treatment. Its aim is always remedial and the patient's work is prescribed with as much care as would be devoted to the compounding of a medicine. Fracture cases are set to work on jobs which help to restore normal movements to the affected joints; brain injury cases require work which will promote co-ordinated muscular action, bring back the power of concentration and enable the patient to resume as far as may be his former pursuits. It has, no doubt, a recreational value but that is of less importance as compared with re-education.

Practically all the objects produced by the patients are bought by them when completed, the price being fixed at cost of material plus 10 per cent. to cover waste. The standard of work turned out is generally high.

During the year two subsidiary workshops have been opened, one for the Plastic Unit and the other for the Tuberculosis Unit. In both the cases are apt to be long-term cases, and especially in the latter, the recreational aspect of the work is emphasised.

By arrangement with the Scottish Command the department was able to undertake a direct contribution to the war effort by making numbers of camouflage nets for guns, etc. This form of occupation is ideally suited for finger and shoulder movements in spinal cases.

**Welfare—Recreation Activities.**—In spite of the increasing difficulty of obtaining transport, it has been possible, apart from the unavoidable break caused by the outbreak of smallpox, to provide an average of one “live” entertainment per week. These have been mainly supplied through the courtesy of the Army Entertainments’ Officer for the Edinburgh area and have consisted of E.N.S.A. touring companies, Army and Air Force Units, and also of a number of amateur civilian concert parties and dramatic clubs. An average attendance of from 400 to 500 is obtained at these entertainments. “High lights” during 1942 included a visit from the Newhaven Fisherwomen’s Choir, a concert by the Scottish Command Orchestra, a show by a Canadian Army Unit, a variety entertainment starring Sir Harry Lauder, a violin recital by Miss Jelly d’Aranji, and a memorable performance of “Murder in the Cathedral” presented in the Memorial Church by the Pilgrim Players.

In addition to these “live” shows, an arrangement has been made with the Army Kinema Officer for the provision of a regular weekly film show, and during the last two months the tuberculous patients in the Annexe have been given the opportunity of seeing the same films in the afternoon. These patients have also been entertained about once a fortnight by local concert parties.

During the year several gramophones gifted to the hospital were distributed to various wards. Over two hundred records have been catalogued and formed into a lending library. An additional wireless set has also been lent by the Army Entertainments Officer for the use of service patients. Gifts of indoor games have also been received from the W.V.S. and the Red Cross, while the *Edinburgh Evening News* presented two footballs.

Football matches and other forms of out-door sports have been arranged at various times, and a very successful Sports Day was held in the summer, prizes being presented by private donors, the local Red Cross branch, and, through the efforts of the R.A.M.C. Unit attached to the hospital, by whist drives and other means.

During the year over 4,000 volumes were issued from the library, including almost 3,000 fiction, about 400 travel, and about 400 biography. The West Lothian Education Committee have now increased their loan of books from 300 to 400 volumes, which are changed every three months. Special technical books have also been obtained for individual patients making special studies, from the Carnegie Central Library.

The permanent collection has been enriched by the gift of over 300 volumes through the agency of Bailie Banks, besides other gifts from the Red Cross and W.V.S.

The Army Education Officer has from time to time co-operated in arranging courses of informal talks and discussions, which have been much appreciated by the men.

By far the most important part of the Welfare Officer’s work consists in dealing with individual cases and helping with personal difficulties of all kinds. Owing

to the private nature of these cases, it is impossible to give details. The majority of them have to do with domestic trouble and range from divorce proceedings to problems affecting dependant's allowances. Sometimes immediate advice or information is all that is necessary, but in all cases where further enquiry was required help is readily obtainable from such organisations as the British Legion, Army Welfare Officers, the Soldiers', Sailors' and Airmen's Families Association, and the Council of Social Service. The W.V.S. have also given invaluable assistance in cases affecting members of the Allied Forces.

**Staff.**—The strength of the nursing staff has been well sustained throughout the year, though towards the end there were indications that difficulties might occur in meeting our additional tuberculosis commitments. It is much to the credit of the staff that practically all of them have undertaken to share in nursing the tuberculous patients. To safeguard their health, all those engaged in this work are subjected to a skin reaction test and periodic X-Ray examination.

Our thanks are due to the members of the Visiting Committee, and in particular to Bailie Banks, for the very real interest they have taken in the work of the hospital and the ready help they have given in many directions. The benefactions of Bailie Banks have ranged from books to billiard tables and are far too numerous to detail. His efforts are highly appreciated by staff and patients alike.



## BACTERIOLOGICAL SERVICES.

The following Report is submitted by the Director of Bacteriological Services on the work carried out for the City in the Bacteriology Department of Edinburgh University from January to December 1942.

The total number of examinations carried out in 1942 was 1,570 more than in 1941. While the number of cases diagnosed as *B. para-typhosus* *B.* infection showed a considerable reduction as compared with 1941, the number of cases diagnosed as Sonne-type dysentery showed an appreciable increase. Diagnostic work for diphtheria and other throat infections did not show much change from 1941 except for the increased number of *B. diphtheriæ* virulence tests carried out. This was over 1,000 in 1942 as compared with 246 in 1941.

The Laboratory work on tuberculosis did not show much change from the previous year. The number of cases diagnosed as meningococcal infection in 1942 was 30, as compared with 93 in 1941; the majority of the meningococcus strains, as before, belong to Group 1.

There has been an increase in the number of Wasserman and other syphilis reactions carried out for the general hospitals. Specimens examined for the Water Department during 1942 numbered 931, which is approximately the same as in 1941.

During the year also 193 milk specimens were tested for the Veterinary Department by the routine methods for bacteriological purity (total bacterial count and *B. coli* test). This work in previous years was done in the Veterinary Department. There were 78 specimens of milk examined for the tubercle bacillus by animal inoculation; only one of these gave a positive result (75 of these specimens were also tested for the tubercle bacillus by the cultural method).

### ROUTINE BACTERIOLOGICAL EXAMINATIONS

(including examinations for Municipal Hospitals).

		Total
Swabs and cultures from throat, nose and ear examined for <i>B. diphtheriæ</i>	Positive 399	
	Negative 3,051	
		3,450
<i>B. diphtheriæ</i> virulence tests ... ..	Positive 265	
	Negative 740	
		1,005
Throat, nose and ear swabs for hæmolytic streptococci and general bacteriological examination ...	Positive: Hæmolytic Streptococci 1,228	
	Positive: Vincent's Angina 14	3,426
Throat and post-nasal swabs examined for Meningococcus ... ..		2
Sputum examined for <i>B. tuberculosis</i> by the microscopic method	Positive 325	
	Negative 2,759	
		3,084
Pus examined for <i>B. tuberculosis</i> , by microscopic method ...	Positive 1	65
Urine and fæces examined for <i>B. tuberculosis</i> , by microscopic method	Positive 8	714
Cultivation test for <i>B. tuberculosis</i> (sputum and other specimens) ...	Positive 152	
	Negative 2,891	
		3,043
Animal inoculation test for <i>B. tuberculosis</i> ... ..	Positive 76	357
(sputum, urine, pleural fluid, etc.)		
	Carry forward	15,146

							Brought forward	15,146
Blood* for Widal reaction (including <i>B. abortus</i> agglutination test) ... ..	Positive	{					<i>B. typhosus</i>	6
		{					<i>B. para. B.</i>	12
		{					<i>B. abortus</i>	6
							Negative	94
								118
Blood-clot-cultures from specimens submitted for Widal reaction ... ..	Positive						<i>B. typhosus</i>	1
								75
Fæces and urine* examined for organisms of enteric and dysentery groups ... ..	Positive	{					<i>B. typhosus</i>	21
		{					<i>B. para. B.</i>	110
		{					Other organisms of	
		{					<i>Salmonella</i> group	19
		{					<i>B. dys.</i> Flexner type	25
		{					<i>B. dys.</i> Sonne type	545
{					<i>B. dys.</i> Newcastle type	10		
					Negative	2,462		
								3,192
Number of cases proved by isolation of specific organism and/or serological examination to be due to:—								
<i>B. typhosus</i> ... ..							8	
<i>B. paratyphosus B.</i> ... ..							13	
Other organisms of <i>Salmonella</i> group ... ..							10	
<i>B. dysenteriae</i> Flexner type ... ..							10	
<i>B. dysenteriae</i> Sonne type ... ..							199	
<i>B. dysenteriae</i> Newcastle type ... ..							4	
<i>B. abortus</i> ... ..							3	
Determination of serological type of pneumococcus: , ... ..								
Type 3 ... ..							3	
Type 6 ... ..							1	
Type 8 ... ..							4	
Type 33 ... ..							1	
							9	
Cerebro-spinal fluid* for general bacteriological examination (including examination for <i>B. tuberculosis</i> (microscopic method) and Meningococcus								
Positive: Meningococcus							32	
Positive: <i>B. tuberculosis</i>							1	
							504	
Number of cases diagnosed as meningococcal infection ... ..							30	
Number of cases in which the meningococcus was cultivated and tested serologically to ascertain the group to which it belonged—								
Group I. ... ..							17	
Group II or ungrouped							2	
							19	
Blood for Wassermann reaction ... ..	Positive						251	
							Negative 1,925	
							2,176	
Syphilis flocculation test—modified Sachs-Georgi method ... ..	Positive						155	
							Negative 1,808	
							1,963	
Syphilis flocculation test—Kahn method ... ..	Positive						200	
							Negative 1,817	
							2,017	
Carry forward							25,219	

							Brought forward	25,219
Cerebro-spinal fluid for Wassermann reaction	...	...	...	Positive	18			
				Negative	134			152
Cerebro-spinal fluid for cytological examination, protein, globulin and other tests	...							289
Cerebro-spinal fluid for colloidal gold test	...	...	...	...	...	...		152
Vaginal, uterine and urethral swabs and smears for gonococcus and general bacteriological examination (gonococcus—1 positive)	...	...	...					443
Complement fixation test (for gonococcal infection)	...	...	Positive	1				
			Negative	82				83
Blood examined for agglutination of <i>Leptospira icterohæmorrhagiae</i> (animal inoculation also included)	...	...	...	Positive	2			
			Negative	9				11
Blood for Weil-Felix reaction	...	...	...	...	...	...	...	4
Blood for culture (general)	...	...	...	...	...	...	...	136
Pus for general bacteriological examination	...	...	...	...	...	...	...	125
Sputum for general bacteriological examination	...	...	...	...	...	...	...	211
Pleural and peritoneal fluids for general bacteriological examination (including examination for <i>B. tuberculosis</i> , by microscopic method)								
			<i>B. tuberculosis</i> —Positive	3				171
Urine and fæces for general bacteriological examination	...	...	...	...	...	...	...	993
Conjunctival smears for general bacteriological examination	...	...	...	...	...	...	...	78
Rats examined for plague infection†	...	...	...	...	...	...	...	20
Water specimens for bacteriological examination	...	...	...	...	...	...	...	931
Milk specimens tested for bacterial count and <i>B. coli</i> .	...	...	...	...	...	...	...	193
Milk specimens tested for <i>B. tuberculosis</i> by animal inoculation.	Positive	1						78
Milk specimens tested for <i>B. tuberculosis</i> by cultural method	...	...	...	...	...	...	...	75
Batches of serum from measles convalescents examined for sterility and the Wassermann reaction	...	...	...	...	...	...	...	11
Miscellaneous examinations	...	...	...	...	...	...	...	80
			Total	...	...	...		29,455

\*The numbers given include repeat tests.

† These were carcasses of rats caught in docks or on board ships arriving from foreign ports and were examined as a precautionary measure. All were negative.

## EXAMINATIONS FOR MUNICIPAL HOSPITALS.

<b>Western, Eastern, Southern and Northern General Hospitals.</b>	<b>Total</b>
Throat, nose and ear swabs for <i>B. diphtheriæ</i>	210
Throat swabs for hæmolytic streptococci and general bacteriological examination	300
Sputum, pus, urine and fæces for <i>B. tuberculosis</i>	953
Cultivation test for <i>B. tuberculosis</i> (sputum and other specimens)	429
Animal inoculation for <i>B. tuberculosis</i>	236
Blood for Widal reaction	24
Blood-clot-cultures from specimens submitted for Widal reaction	18
Fæces and urine for organisms of enteric and dysentery groups	169
Cerebro-spinal fluid for general bacteriological examination (including examination for <i>B. tuberculosis</i> and meningococcus)	110
Blood for Wassermann reaction	1,902
Syphilis flocculation test—modified Sachs-Georgi method	1,795
	Carry forward
	6,146

				Brought forward	6,146
Syphilis flocculation test—Kahn method	...	...	...	...	1,843
Cerebro-spinal fluid for Wassermann reaction	...	...	...	...	147
Cerebro-spinal fluid for cytological examination, protein, globulin and colloidal gold tests	...	...	...	...	235
Vaginal, uterine and urethral swabs and smears for gonococcus and general bacteriological examination	...	...	...	...	131
Sputum, pus, urine and faeces for general bacteriological examination	...	...	...	...	990
Pleural and peritoneal fluids for general bacteriological examination (including examination for <i>B. tuberculosis</i> )	...	...	...	...	131
Determination of serological type of pneumococcus	...	...	...	...	7
Other examinations	...	...	...	...	135
			Total	...	<u>9,765</u>
<b>Western General Hospital</b>	...	Total	...	5,776	
<b>Eastern General Hospital</b>	...	Total	...	2,305	
<b>Southern General Hospital</b>	...	Total	...	1,672	
<b>Northern General Hospital</b>	...	Total	...	12	
<b>City Hospital for Infectious Diseases.—</b>					Total
Throat, nose and ear swabs for <i>B. diphtheriae</i>	...	...	...	...	75
<i>B. diphtheriae</i> virulence tests	...	...	...	...	960
Sputum, pus, urine and faeces for <i>B. tuberculosis</i>	...	...	...	...	150
Cultivation test for <i>B. tuberculosis</i> (sputum, etc.)	...	...	...	...	149
Animal inoculation for <i>B. tuberculosis</i>	...	...	...	...	50
Blood for Widal reaction	...	...	...	...	42
Blood-clot-cultures from specimens submitted for Widal reaction	...	...	...	...	32
Faeces and urine for organisms of enteric and dysentery groups	...	...	...	...	2,734
Cerebro-spinal fluid for general bacteriological examination (including examination for <i>B. tuberculosis</i> and meningococcus)	...	...	...	...	391
Blood for Wassermann reaction	...	...	...	...	30
Syphilis flocculation test—modified Sachs-Georgi method	...	...	...	...	29
Syphilis flocculation test—Kahn method	...	...	...	...	30
Cerebro-spinal fluid for Wassermann reaction	...	...	...	...	2
Cerebro-spinal fluid for cytological examination, protein, globulin and colloidal gold tests	...	...	...	...	189
Vaginal, uterine and urethral swabs and smears for gonococcus and general bacteriological examination	...	...	...	...	330
Sputum, pus, urine and faeces for general bacteriological examination	...	...	...	...	192
Pleural and peritoneal fluids for general bacteriological examination (including examination for <i>B. tuberculosis</i> )	...	...	...	...	10
Determination of serological meningococcus	...	...	...	...	19
Batches of serum from measles convalescents examined for sterility and the Wassermann reaction	...	...	...	...	9
Other examinations	...	...	...	...	114
			Total	...	<u>5,537</u>
<b>Royal Victoria Hospital and Dispensary.</b>					Total
Sputum for <i>B. tuberculosis</i>	...	...	...	...	2,111
Cultivation test for <i>B. tuberculosis</i> (sputum, etc.)	...	...	...	...	1,937
Animal inoculation for <i>B. tuberculosis</i>	...	...	...	...	58
Blood for Wassermann reaction	...	...	...	...	105
Syphilis flocculation test—modified Sachs-Georgi method	...	...	...	...	100
Syphilis flocculation test—Kahn method	...	...	...	...	102
Sputum, pus, urine and faeces for general bacteriological examination	...	...	...	...	15
Pleural and peritoneal fluids for general bacteriological examination (including examination for <i>B. tuberculosis</i> )	...	...	...	...	26
Other examinations	...	...	...	...	21
			Total	...	<u>4,475</u>
Total examinations for Municipal Hospitals	...	...	19,777		



## SANITARY DEPARTMENT.

### ANNUAL STATEMENT FOR THE YEAR 1942.

Complaints by citizens ... ..	3,171
Complaints by other departments ... ..	108
Nuisances discovered and reported by District Inspectors ... ..	4,758
	<u>8,037</u>

### CLASSIFICATION OF NUISANCES.

#### Drainage and Sanitary Appliances.

Drains cleared or repaired and sanitary appliances renewed or repaired ...	688
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#### Water Supply.

Cisterns and water pipes repaired or renewed ... ..	539
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#### Repairs to Houses.

Repairs to floors, windows, doors, walls, etc. ... ..	326
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#### Nuisances Removed.

Nuisances due to smoke, flooding, overerowing, rats and other causes ... ..	6,484
	<u>8,037</u>

#### Prosecutions.

Dirty stairs (9); Dirty houses (5); Nuisances (4); Unregistered Lodging House (1) ... ..	Total Prosecutions ...	19
Total Fines imposed ... ..	£28, 2s. 6d.	

## H O U S I N G.

#### Slum Clearance and Redevelopment.

Houses vacated ... ..	26
Persons displaced ... ..	96
Houses demolished ... ..	20

### SHOPS ACTS, 1912-38.

Inspections of retail and wholesale shops including warehouses ... ..	809
Contraventions regarding hours of employment, closing order, etc. ... ..	10
Improvements effected in sanitary accommodation, washing facilities, heating and other sanitary matters ... ..	21
Convictions obtained in prosecutions ... ..	1
Total fines imposed ... ..	£5

**FACTORIES ACT, 1937.**

Inspections of Factories with mechanical power ... ..	1,143
Inspections of Factories without mechanical power ... ..	641
Sanitary and miscellaneous improvements effected ... ..	530

**SALE OF FOOD AND DRUGS ACTS, ETC.**

Total Samples of Food and Drugs taken ... ..	1,114
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**Milk.**

Statutory samples of Sweet Milk taken ... ..	172
Samples reported adulterated ... ..	27
Prosecutions ... ..	3
Total fines imposed ... ..	£35, 0s. 0d.

**Mince.**

Statutory samples of mince taken ... ..	9
Contraventions respecting the addition of preservatives ... ..	2
Convictions obtained ... ..	2
Total fines imposed ... ..	£6, 0s. 0d.

**Sausages.**

Statutory samples of sausages taken ... ..	15
Convictions obtained respecting the addition of preservatives ... ..	1
Total fines imposed ... ..	£2, 0s. 0d.

**The Fertilisers and Feeding Stuffs Act, 1926.**

Statutory samples taken ... ..	8
Samples conforming to the provisions of the Act ... ..	8

**The Rag Flock Acts, 1911-1928.**

Samples of Rag Flock taken ... ..	2
Samples in conformity with the Act ... ..	2

**PORT SANITARY INSPECTION.**

Ships boarded and inspected ... ..	1,089
Nuisances discovered and removed, including lack of cleanliness in living quarters, galleys, food stores and pantries, defective sanitary appliances, and the presence of rats, and other vermin ... ..	897
Baits laid for the destruction of rats in the dock areas ... ..	10,000

## VETERINARY DEPARTMENT.

### REPORT BY CHIEF VETERINARY INSPECTOR.

#### Milk and Dairies (Scotland) Act, 1914.

Visits to dairy premises	...	...	...	...	...	...	...	235
Newly-calved cows inspected in the Markets before being offered for sale	...							507
Premises on the Register at 31st December	...	...	...	...	...			39
Cowsheds on these premises	...	...	...	...	...	...	...	64
Average number of cows accommodated therein	...	...	...	...	...			1,202
Certificates of Registration cancelled	...	...	...	...	...	...	...	3
Certificates of Registration transferred to new tenants	...	...	...	...	...			1
Premises licensed under the Cattle-sheds in Burghs (Scotland) Act, 1866	...							23
Average number of cows accommodated therein	...	...	...	...	...			60

#### Milk (Special Designations) Order (Scotland), 1936.

Producers' licences in force during 1942 :

Standard	...	...	...	...	...	...	...	...	9
Certified	...	...	...	...	...	...	...	...	1

#### Bacteriological Laboratory.

Bacteriological examination of Milk :

Number of samples examined :

Certified	...	...	...	...	...	...	...	20
Tuberculin tested	...	...	...	...	...	...	...	29
„ „ (as supplied to Schools)	...	...	...	...	...	...	...	39
Standard	...	...	...	...	...	...	...	41
Pasteurised	...	...	...	...	...	...	...	20
Milk for City Hospitals	...	...	...	...	...	...	...	5
Ordinary	...	...	...	...	...	...	...	55
								209

Bulk Milk Samples subjected to biological test for tuberculosis :—

(Brought forward incomplete at the end of 1941) 12 Negative 12

Tested and completed at 31st December 1942 64 „ 63 (Inconclusive 1)

Remaining under Test at 31st December 1942 25

101

## INSPECTION OF MEAT AND OTHER FOODS.

### Gorgie Abattoir.

Class of Animals.	Number of Animals.			Weight (in lbs.) of Condemned Meat and Offals. (Offal Weights Estimated).
	Slaughtered.	Wholly Condemned.	Partially Condemned.	
Cattle	22,088	365	623	400,231
Sheep	161,590	437	513	36,690
Pigs	7,007	88	134	25,779
Calves	12,338	103	28	10,607

## Retail Shops, Street Hawkers, Etc. :—

Visits during the year	...	...	...	...	...	...	...	...	5,161
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Foodstuffs seized in Markets, Etc.	...	...	...	...	...	...	...	203,310 lbs
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## Public Health (Meat) Regulations :—

Certificates of Approval granted in respect of accommodation provided for the storage of meat overnight, by persons who do not keep an open shop. (Renewals during 1942)	...	...	...	...	...	...	...	5
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Imported Foodstuffs inspected under the Public Health (Imported Food) Regulations (Scotland), 1937. Number of consignments	...	...	...	...	...	...	...	52
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Imported Foodstuffs condemned or rejected and re-exported at the Port of Leith	...	...	...	...	...	...	...	...	1,982,016 lbs.
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Summary, showing total diseased and unsound foodstuffs dealt with by the Department, in the City, during 1942 :—

	Weight in lbs.
At Abattoir—Carcases ... ..	300,520
Offal (weight estimated) ...	172,787
In Shops, Warehouses, etc. ... ..	203,310
At the Port of Leith ... ..	1,982,016
	<u>2,658,633</u>

Equal to 1,186 Tons 17 Cwts. 89 lbs.





